Textile Industries

OCTOBER, 1949

formerly COTTON Textile Industries

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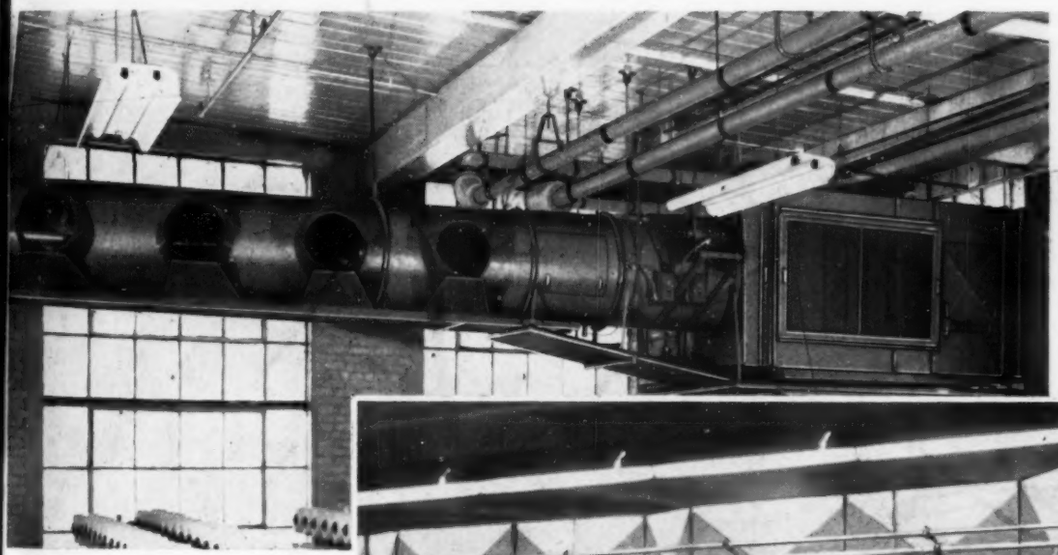
PER. SECT. 23

Bahnson Air Conditioning Systems



Humiduct installation providing humidity and temperature control with cooling by refrigeration.

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Central Station installation providing humidity and temperature control with cooling by refrigeration.

Bahnson Company

POSITIVE CIRCULATION · LOWER OPERATING COST

AIR CONDITIONING ENGINEERS

WINSTON-SALEM, N. C.

THAT'S

AHCOWET*

ANS--RS--or--N

Quick as a wink! That's how fast the Ahcowets* work in wetting or rewetting textile fibres of all types and in all forms. Each member of the Ahcowet* family has distinctive characteristics which make it particularly suitable for certain jobs, and they all have outstanding advantages.

Here's the story.
Take your pick.

PRODUCT	USES	PROPERTIES
AHCOWET* ANS (Anionic)	Where wetting and detergency are required. Suitable for carbonizing.	Excellent penetrating and detergent properties. Good resistance to alkalis and inorganic salts. Unaffected by hard water and strong acids (up to 5% concentration)—thus suitable for carbonizing.
AHCOWET* RS (Anionic)	For wetting, rewetting and softening, to get quick and uniform penetration as in dyeing and Sanforizing.	Wets instantly in strong acid solutions up to 2% concentration, in neutral solutions and in concentrations of calcium and magnesium salts up to 700-750 parts per million. Good softening power.
AHCOWET* N (Non-Ionic)	Where anionic or cationic agents are rendered inactive.	Efficient in 10%-20% concentrations of salts, 5%-10% acids, and up to 5% solutions of alkali and sodium sulphate. Considerable detergent properties.

Technical data sheets on request

AHCO

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Manufacturing Chemists • Established 1815

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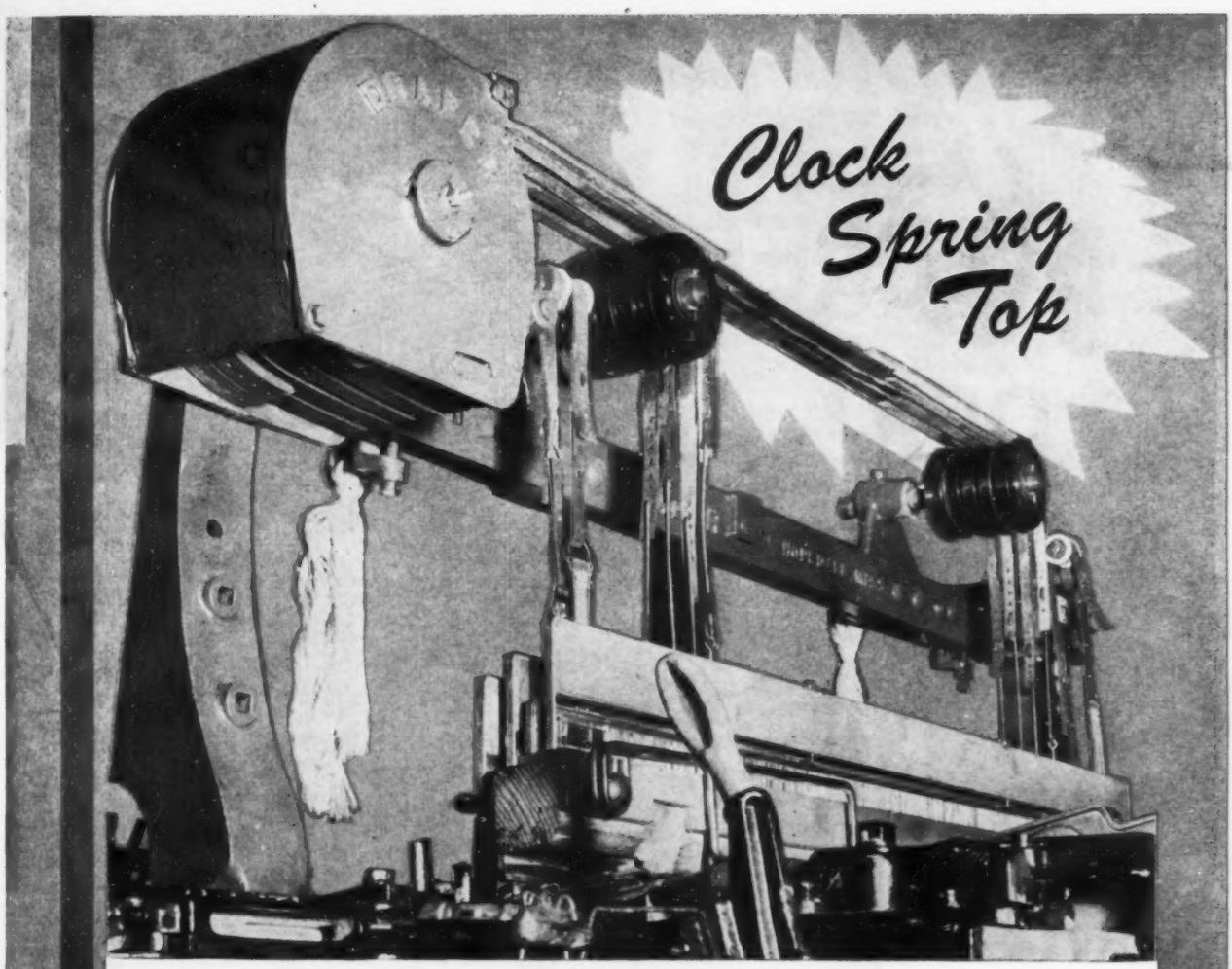

The mainspring of a clock is designed to give lifetime service under exhausting conditions. Draper engineers have incorporated this principle into a new top motion.

Extensive trials have confirmed the soundness of this design. One mill reported, after five years on heavy fabrics, that spring breakage was negligible.

Since it is enclosed, the Clock Spring Top is clean. Because of the easier action and less strain the Clock Spring Top substantially reduces wear on all top motion parts.

Available for the X-2, XD, XP, X and E with one set, or 2 sets on heavy weaves, this top has a capacity of up to six harnesses.

For the most efficient and best top motion, try the Clock Spring Top.

DRAPER CORPORATION
HOPEDALE MASSACHUSETTS U. S. A.

NO SPLATTER
NO CREEP
NO DRIP

Texaco Stazon stays on the bearing surfaces, stays off yarn and fabric

USE *Texaco Stazon* on top rolls. It won't creep onto the cot, so cleaner sliver and yarn are assured. Use *Texaco Stazon* for loom lubrication. It won't splatter or drip onto the fabric. Inspectors everywhere know: *"Stazon stays on"*... assures greater production of stain-free goods . . . reduces costs.

Texaco Stazon has other advantages. It is a highly stable lubricant . . . does not form gummy deposits . . . is unaffected by humidity. And fewer applications are necessary because each application lasts longer.

Let a Texaco Lubrication Engineer help you select the proper consistency to give you best assurance of cleaner yarn and fabric. Just call the nearest of the more than 2300 Texaco Wholesale Distributing Plants in the 48 States, or write The Texas Company, 135 East 42nd Street, New York 17, N. Y.

LONGER BEARING LIFE. Use *Texaco Regal Starfak* in grease-lubricated ball and roller bearings. These fine lubricants resist oxidation, gum formation, separation and leakage... assure longer bearing life... lower maintenance and operating costs.

TEXACO

TEXACO Lubricants

FOR THE TEXTILE INDUSTRY

Volume 113, Number 10

Textile Industries

October, 1949

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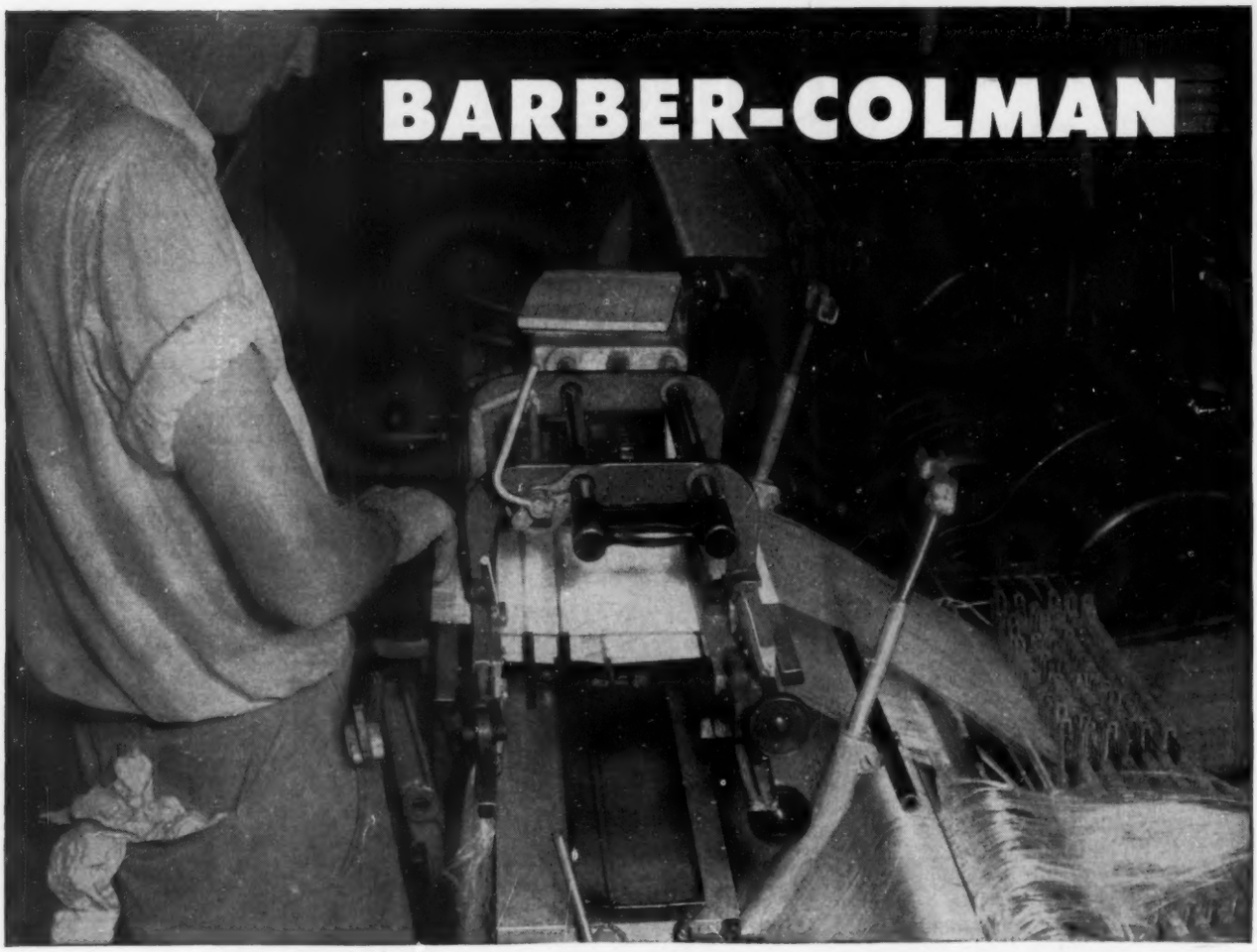

PORTABLE WARP TYING MACHINES MAKE SUBSTANTIAL COST SAVINGS IN SMALL MILLS

Portable
WARP TYING MACHINE

Many of the smaller mills are finding that a Barber-Colman Portable Warp Tying Machine is a profitable investment — even though its full-time capacity is not needed or used. This machine offers a fast and accurate means for tying-in new warp *at the loom.* It can be handled satisfactorily in confined and hard-to-reach spaces and in loom alleys as narrow as 12". An inexperienced hand can learn to operate it capably in a comparatively short time. Overall production capacity of the machine averages 3500 to 4500 ends per hour, varying with the sley of the warp. On high sley warps, production may run as high as 5500 ends per hour. Interchangeable knotter units enable the machine to tie a wide range of counts, and models are available to handle cotton, wool, silk, or synthetics. Tying is accurate and uniform and so much more efficient than common hand methods that the machine will pay for itself quickly in cost savings. *For full details and specific recommendations for your mill, consult your Barber-Colman representative.*

AUTOMATIC SPOOLERS • SUPER-SPEED WARPERS • WARP TYING MACHINES • DRAWING-IN MACHINES

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Rayon Reports

Avisco Develops New Process for Improving Heat Stability of Polyethylene Fabrics

A new finishing treatment which gives polyethylene fabrics greater stability to heat has been developed by the American Viscose Corporation. The new technique is capable of controlling fabric shrinkage to less than 2 per cent at 165° F.

Avisco believes that the solution of this problem removes the last barrier from polyethylene's widespread use in fabrics for automobile seat covers, upholstery, handbags, shoes, luggage, and various other applications.

The first step in the new stabilizing process is to treat the fabric in semi-relaxed form with hot water, to allow shrinkage in both warp and filling directions.

Then the material receives a brief steam treatment on a decating machine to enhance uniformity and flexibility.

For smooth fabrics, a final calendering is recommended. All three of these operations can be done on commercial equipment at reasonable cost.

Polyethylene plastic monofilament yarns have been produced on an experimental scale by Avisco for the last two years. During this time the various problems of production and use have been under intensive study at the corporation's chemical research and textile research departments. Filament sizes extruded to date have been from 6 mils (152 denier) in diameter up, with 10 and 12 mil representing the most popular sizes.

Polyethylene has the distinction of being the only textile fiber lighter than water, and fabrics made from it are naturally very light. It can be made in either bright or dull luster and in a wide range of brilliant colors.

RAYON 20 YEARS AGO

NEW YORK, October, 1929 – Makers of artificial flowers are using rayon for their products. Large flat flowers of transparent velvet are being featured in shades to match the new fall costumes.

NEW YORK, October, 1929—A representative of the Rayon Institute reports that dry cleaning of rayon is today considered foolproof if properly handled. Any of the eleven chemicals commonly used to remove spots can be used successfully to clean viscose rayon.

NEW YORK, October, 1929 – The United States now leads the world in production and consumption of rayon. At the present time the capacity of American plants is approximately 100 per cent greater than that of our nearest foreign competitor.

MAKE USE OF *Avisco*® 4-PLY SERVICE

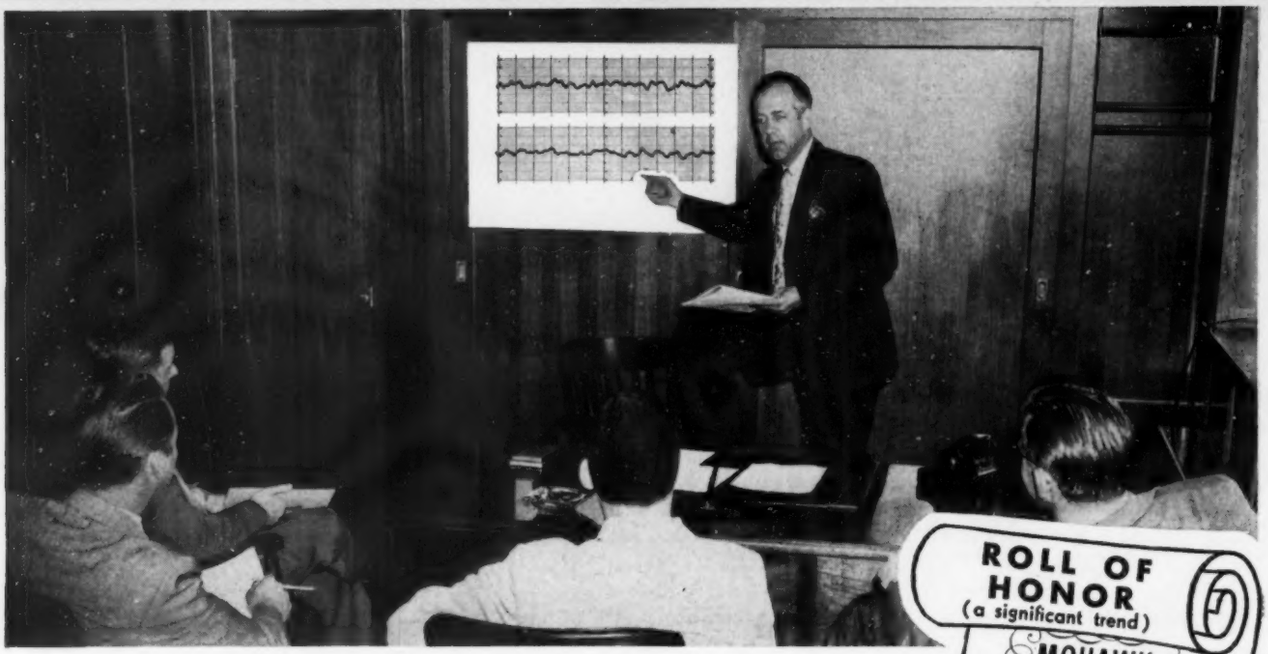
To encourage continued improvement in rayon fabrics, American Viscose Corporation conducts research and offers technical service in these fields:

1 FIBER RESEARCH
2 FABRIC DESIGN
3 FABRIC PRODUCTION
4 FABRIC FINISHING

AMERICAN VISCOSE CORPORATION

America's largest producer of rayon

Sales Offices: 350 Fifth Avenue, New York 1, N. Y.; Charlotte, N. C.; Cleveland, Ohio; Philadelphia, Pa.; Providence, R. I.



The best sheets in the country are made in mills equipped with

SACO-LOWELL **Combers**

There is unquestionably a sound reason for this! To put our product on an equal footing, we must have equipment which has been proven in competition. Manufacturers of the best combed yarns use Saco-Lowell Combers. I have seen them in operation. I was impressed by the favorable reports I received concerning

the uniformity of the sliver

the high production per man-hour

the effective control of the noils

their low cost of maintenance

the overall satisfaction of the operators in charge

and the generally pleasing appearance of the comber.

☆ ☆ ☆ ☆ ☆ ☆ ☆

MANUFACTURERS OF COMBED YARNS will find it worth while to study their combing unit as a starting point on a Saco-Lowellizing program . . . since the result of the new comber equipment will be immediately apparent in a **better yarn, lower costs, and higher production.**

Our engineers will be glad to discuss this matter with you at your convenience. Just call our nearest Sales Office.

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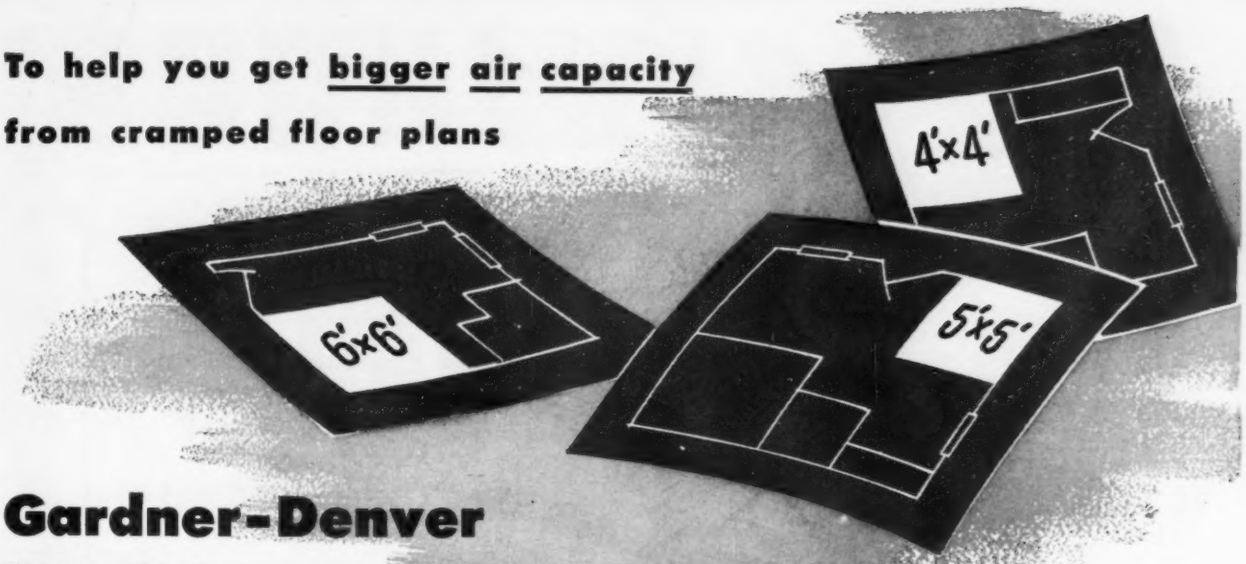
60 BATTERYMARCH STREET, BOSTON 10, MASS.

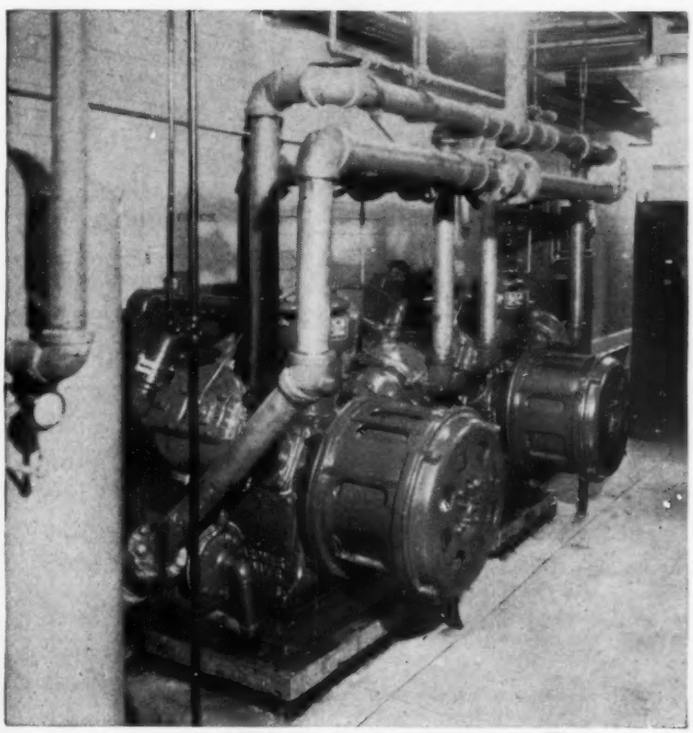
Shops at BIDDEFORD, MAINE and SANFORD, N. C.

SALES OFFICES CHARLOTTE • GREENVILLE • ATLANTA

To help you get bigger air capacity from cramped floor plans



Gardner-Denver "WB" Compressors are made in 7 sizes!



Compact Gardner-Denver "WB" Two-Stage, Vertical Water-Cooled Compressors, with built-in motors.

Here's how you can have *greater air capacity* — even though floor plans are crowded! Install a Gardner-Denver "WB" — the vertical, two-stage compressor that's built in seven space-saving capacities from 142 to 686 cubic feet displacement per minute. The smallest size fits into a four-foot square — the largest requires only about six feet each way.

Compactly designed with integral motor and self-contained cooling system, the "WB" rates high in efficiency. Completely water-jacketed cylinders and heads, plus balanced construction — two low pressure cylinders for each high pressure cylinder — assure low power costs and an air supply you can always count on.

Other big "WB" advantages:

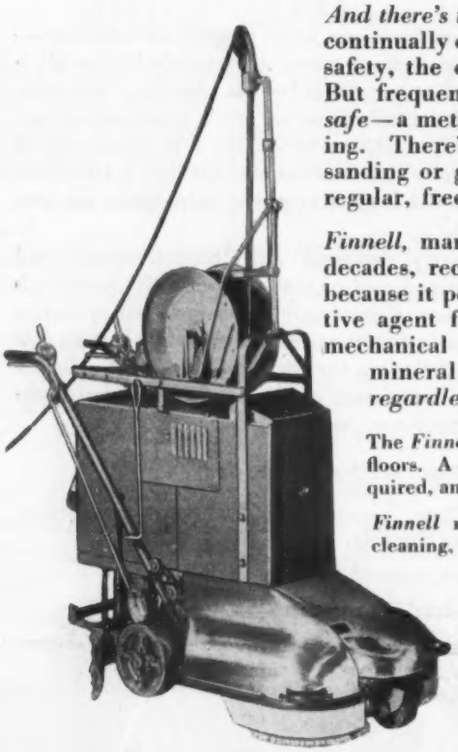
- ★ Duo-Plate "air-cushioned" valves — quiet, simple and durable.
- ★ Timken tapered roller main bearings.
- ★ Force-feed lubrication system.
- ★ Furnished with built-in motor — or with sheave for "V"-belt drive.

GARDNER-DENVER SINCE 1859

Gardner-Denver Company, Quincy, Illinois
In Canada: Gardner-Denver Company (Canada), Ltd., Toronto, Ontario

Atlanta, Ga.	Birmingham, Ala.	Boston, Mass.
Knoxville, Tenn.	Washington, D. C.	New York, N. Y.
Philadelphia, Pa.	Pittsburgh, Pa.	New Orleans, La.

There's No Substitute for It!



And there's no substitute for wet-scrubbing oily wood floors! Where oil drops continually on floors, as in textile mills, *frequent cleaning is essential.* Worker safety, the elimination of fire hazards, and good housekeeping require it. But frequent cleaning calls for care in selecting the method. It should be *safe*—a method that won't injure floors regardless of the frequency of cleaning. There's a time and a place for occasional reconditioning of floors by sanding or grinding down the floor surface, but that is no substitute for a regular, frequent cleaning schedule as required in textile mills.

Finnell, manufacturers of floor-maintenance equipment for more than four decades, recommends wet-scrubbing for cleaning oily wood floors. First, because it permits the use of a fast-acting mineral oil solvent, the most effective agent for emulsifying grimy oil and grease for speedy removal with mechanical equipment. Second, because wet-scrubbing with a fast-acting mineral oil solvent, such as *Finnell's Setol,* is *thoroughly* safe for floors *regardless of the frequency of cleaning.*

The *Finnell* illustrated at left is a *Self-Propelled Scrubber-Vacuum* for use on large-area floors. A complete cleaning unit *all in one,* it applies the cleanser, scrubs, rinses if required, and picks up. Cleans up to 8,750 sq. ft. per hour!

Finnell makes equipment for dry-scrubbing as well as wet-scrubbing, and for dry-cleaning, waxing, and polishing; also a full line of *Cleansers, Sealers, Waxes, Steel-Wool Pads, Mop Trucks,* and other accessory equipment. And there's *a Finnell man nearby* to help train your maintenance operators in the proper use of *Finnell Equipment and Supplies.*

For consultation, demonstration, or literature, phone or write nearest *Finnell Branch* or Finnell System, Inc., 1310 East Street, Elkhart, Indiana. Branch Offices in all principal cities of the United States and Canada.

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Pioneers and Specialists in

FLOOR-MAINTENANCE EQUIPMENT AND SUPPLIES

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New super-tough
V-BELT
tames toughest
textile mill drives
GOODYEAR INDUSTRIAL RUBBER PRODUCTS
G-T-M -Specified
TEXTILE SPECIAL V-BELTS
A Multiple-ply bias-cut fabric envelope minimizes surface wear.
B Four-ply cord fabric strength-member for elasticity and greater strength.
C Gum cushion in compression section.

You know how tough textile mill drives are on V-Belts. Heavy overloads and high starting torques are common. Misalignment of sheaves and resulting uneven load-distribution accelerate belt wear — cause early failure in most conventionally designed belts.

That's why Goodyear now offers the Textile Special V-Belt designed by the G.T.M. — Goodyear Technical Man — to tame these tough drives. This new V-belt is built around a strength member consisting of several plies of multiple-cord fabric — giving the belt great strength and at the same time assuring the elasticity which permits the belt to tolerate misalignment that would quickly ruin regular belts. The bias-cut envelope or fabric cover of the Goodyear Textile Special V-Belt is designed to provide maximum resistance to surface wear even under difficult conditions.

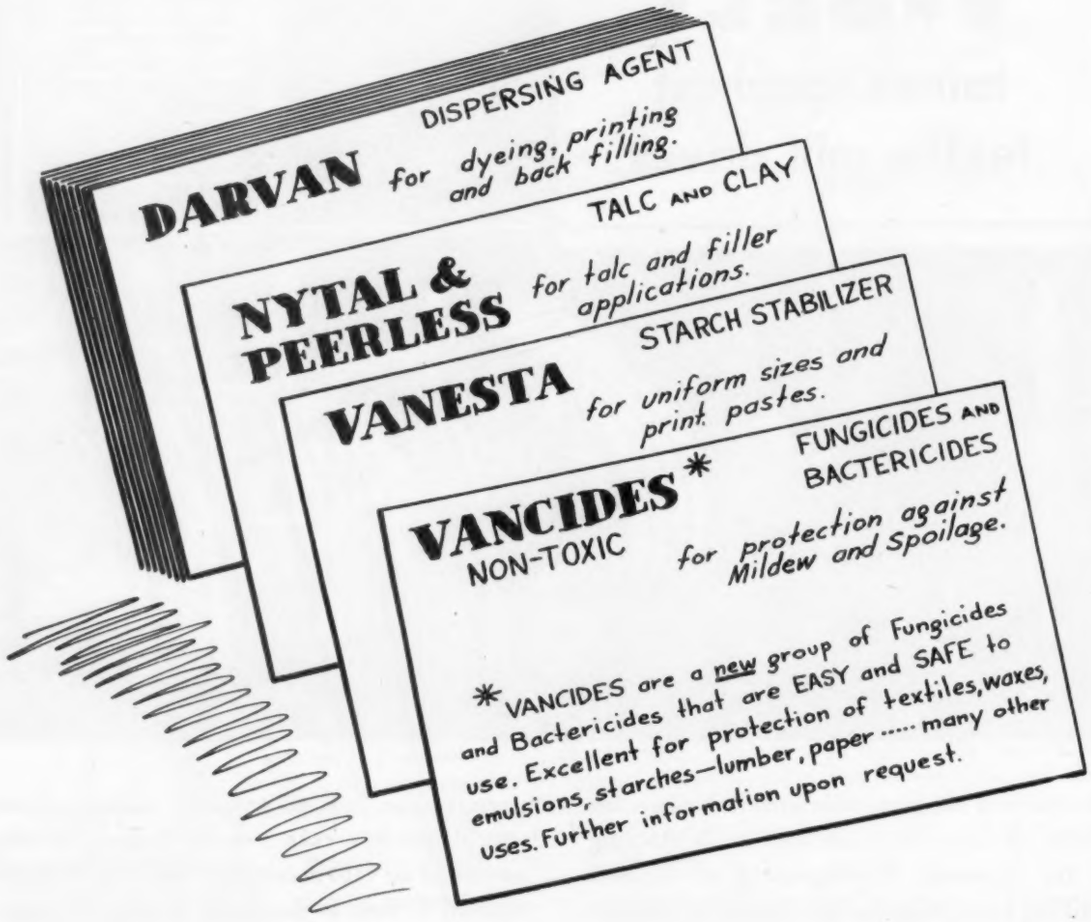
Ask the G.T.M. about Goodyear Textile Special V-Belts, available in all popular textile mill sizes. Or write Goodyear, Akron 16, Ohio.

For Hose, Flat Belts, V-Belts, Molded Goods, Packing, Tank Lining *built to the world's highest standard of quality, phone your nearest Goodyear Industrial Rubber Products Distributor.*

GOODYEAR

THE GREATEST NAME IN RUBBER

TEXTILE CHEMICALS . . .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DISPERSING AGENT
for dyeing, printing and back filling.
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for talc and filler applications.
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for uniform sizes and print pastes.
VANCIDES*
NON-TOXIC
FUNGICIDES AND BACTERICIDES
for protection against Mildew and Spoilage.
*VANCIDES are a new group of Fungicides and Bactericides that are EASY and SAFE to use. Excellent for protection of textiles, waxes, emulsions, starches—lumber, paper ..... many other uses. Further information upon request.

DESCRIPTIVE LITERATURE UPON REQUEST

R. T. VANDERBILT CO. INC.

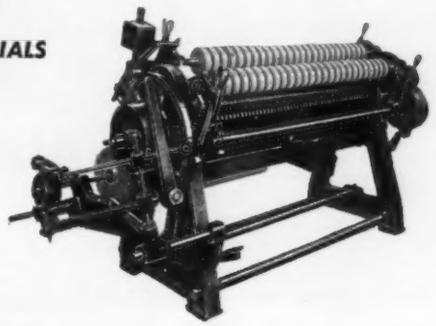
230 Park Avenue, New York 17, N. Y.

Camachines

. . . for men with ideas

With more than twenty different models for the textile industries to choose from, Camachines offer a practical answer to every slitting and roll-winding problem. Illustrated below are four typical Camachines for men with ideas about increased production, improved quality and lower costs . . .

TACKY MATERIALS

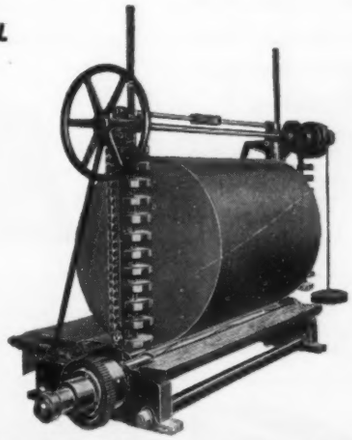


CAMACHINE 26-3A is especially designed for handling tacky or unevenly coated materials, such as adhesive tapes. Machine widths 26" to 56". Accommodates a 32" diameter mill roll. Rewinds rolls as narrow as ½", or up to 17¼" in diameter. Operates at speeds up to 400 fpm.

BIAS BINDING

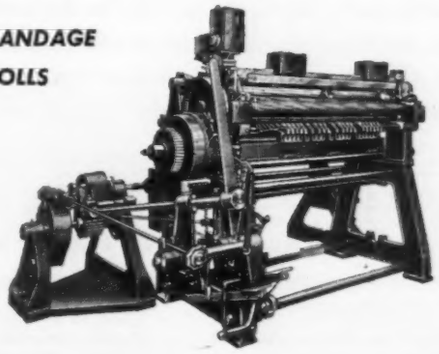
CAMACHINE 40-3L is the ideal machine for converting straight and bias binding fabrics (also specialty fabric) into strip in rolls. Machine widths 26" to 56". Accommodates material from roll, piece or fold. Rewinds rolls as narrow as ½", or up to 22" diameter. Speed up to 150 fpm from fold; higher from roll.

LOW MODEL WINDER



CAMACHINE 44-W low model winder operates in conjunction with processing machines as in bleacheries, fabric printing plants and bag factories. Available in machine widths from 32" to 82". Produces firm, uniformly rewound rolls up to 36" in diameter at speeds up to 1000 fpm.

BANDAGE ROLLS



CAMACHINE 40-4B, a semi-automatic machine for fast production of gauze bandage rolls. Machine widths 42" to 50". Accommodates 24" diameter mill roll. Rewinds rolls as narrow as ½", or up to 12" diameter. Machines come equipped with automatic stop for producing rolls of predetermined length.

Cameron Machine Company, 61 Poplar St., Brooklyn 2, N. Y.

WRITE FOR LITERATURE

AA—188

Camachines

FOR FAST, TOP QUALITY ROLL PRODUCTION

. . . the world over

CELANESE* ACETIC ACID

OVERNIGHT DELIVERY BY TANK TRUCK

to all points in Southern Textile Areas

A new, up-to-the-minute service for the textile industry is now in operation with the completion of terminal facilities at Rock Hill, South Carolina. From this storage point, textile plants in the southern area can obtain overnight deliveries of the highest quality acetic acid—in tank truck quantities.

This southeastern source for acetic acid will give Celanese customers the benefits of bulk prices and the efficiency of less-than-tank-car shipments.

GLACIAL ACETIC ACID U. S. P.

Acetic Acid Content	99.5% by weight, minimum purity
Water Content	0.5% by weight, maximum
Freezing Point	15.6°C, minimum
Specific Gravity	1.050 to 1.055 @ 20/20° C.
Color	Water White
Formic Acid Content	0.05% by weight, maximum
Non-Volatile Matter	0.001% by weight, maximum
Iron Content	1.0 PPM by weight, maximum
Permanganate Time	2 hrs. min.

Also lower concentrations to 80%

CELANESE CORPORATION OF AMERICA
Chemical Division, Dept. 47-J
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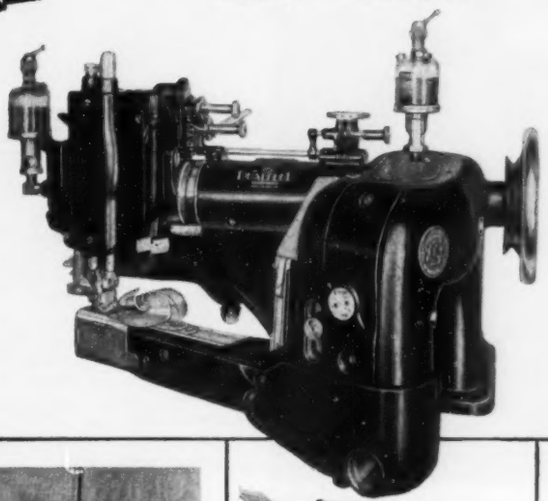
Celanese* CHEMICALS

*Reg. U.S. Pat. Off.

ALCOHOLS · ALDEHYDES · GLYCOLS · KETONES · ACIDS · SOLVENTS · PLASTICIZERS · INTERMEDIATES

For Smooth, Rugged Seams and LOW OVERALL COST

...check these advantages of the **"DUALFEED"** *Machine*

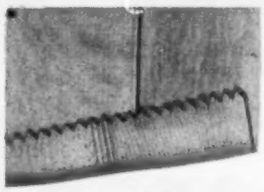


Overalls, work pants, and other heavy-duty garments not only *look* better—they *last longer* too, when the out and in-seam operations are done on the "Dualfeed" machine. Moreover, these neat, long-wearing seams actually cost you *less* in the long run—because the "Dualfeed" is designed to operate with the precision of a fine watch, yet take the punishment of sustained, high-speed operation day after day with comparatively little attention or maintenance.

Your operators will like this machine too—its roomy work clearance, comfortable operating position, dependable performance, easy threading, and the positive synchronized upper and lower feeds which virtually prevent wrinkled or distorted seams.

The "Dualfeed" is available with two or three needles, producing two or three rows of U.S. Standard Stitch Type 401.

For complete information, write for your free copy of Bulletin No. 802.



The neat, strong and durable seams are free from wrinkles or distortion—eliminating one of the most frequent causes of rejected garments.

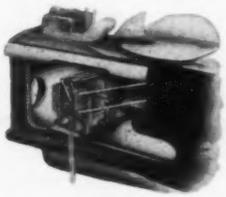
Positive synchronization of upper and lower feeds permits both plies to be fed evenly for full length of seam without operator's assistance.

Folder is specially designed for desired seam in material being handled. Slides back when not in use, for greater freedom in finishing and repairing.

Unique feed-off-the-arm principle enables operator to work in a natural, restful position—eliminates fatigue and contributes to increased output.

Narrow work arm is widely separated from base, providing greater clearance for easy handling and disposal of bulky work.

Single, solid base principle provides for easy installation on either Sectional Power Tabling or newly designed Individual Motor Table.



Looper holder can be swung outside of arm for easy threading. Arm cap facilitates removal of broken needles or accumulated lint and filler.

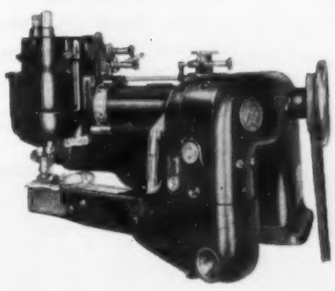
Semi-automatic lubrication eliminates approximately 15 oil holes formerly required for manual oiling. Saves operator's time and increases bearing life.

For Lighter Weight Materials, the

"FELDLOCK"

with Automatic Lubrication offers the same outstanding advantages as the "Dualfeed." For complete information, ask for Bulletin No. 896.

These machines are *AVAILABLE NOW!*



WILLCOX & GIBBS
Sewing Machine Co.

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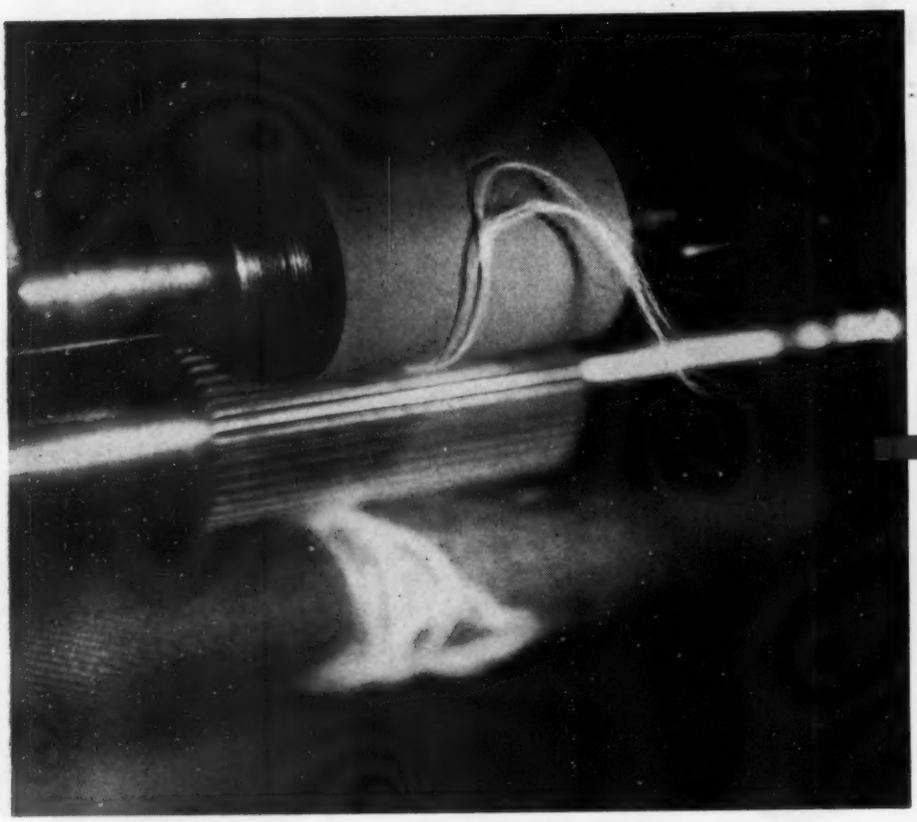
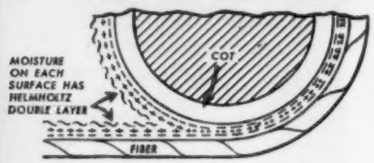


These action photos were taken at 1/250,000 second while cots were running 300 revolutions per minute.

LAPPING UP is caused by surface attraction between cot and fiber

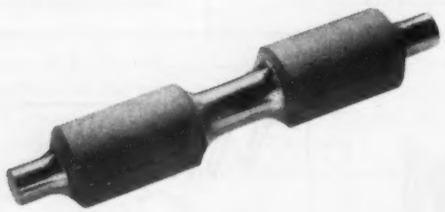
THIS COT LAPS



Moisture layers of fiber and cot contain electric charges that attract fiber to cot. When pressed together, the combined moisture layers have the effect of adhering fibers to the cot and causing them to lap up.

How J-490 Accotex

Armstrong's general-purpose roll covering . . . NC-727 Accotex



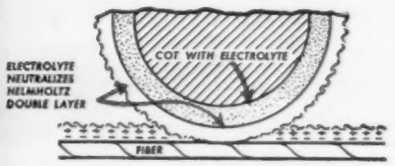
A cork-loaded synthetic rubber cot that combines the superior drafting properties of cork with the long life of rubber. Because of its cork content, NC-727 produces less eyebrowing than any other synthetic cot. It resists slicking and drafts a more uniform, stronger yarn.

Whether you are spinning cotton, wool, or synthetic fibers, Armstrong can supply you with a cover specially formulated for the job. Your Armstrong representative will gladly arrange a test installation in your mill.

ACCOTEX COTS
CORK COTS

NO LAPPING occurs when cot covers contain certain electrolytes

THIS COT DOESN'T LAP



Electrolyte incorporated in patented J-490 Accotex® composition destroys electric charge in moisture layer of cot. Thus there is no attraction of fiber to cot and no tendency for the fiber to lap up.

Cots reduce lapping

Armstrong's J-490 Accotex Cots reduce lapping by eliminating its basic cause, the electrical attraction between roll covering and fiber.

Just how this is done with added electrolytes is described in the pictures and diagrams above. To practical mill men, this patented feature of Armstrong's J-490 Accotex Cots means that broken ends won't tend to adhere to the cot surface. Hence, top roll laps are virtually eliminated.

In addition, J-490 Accotex Cots are exceptionally durable. They'll give months of front-line service without perceptible wear. When the cot surface needs cleaning, it can be rebuffed for but a few cents per roll per buff. With most yarns, you can count on a total life of at least five to six years when you use J-490 Accotex Cots.

Temperature and humidity changes won't affect the specially developed synthetic used in J-490 Accotex. It won't sweat or flatten during normal shutdown periods.

When maximum eyebrow resistance is required, use J-490 Accotex Cots with revolving clearers.

See the remarkable performance of Armstrong's J-490 Accotex Cots on your own frames. Call your Armstrong representative to arrange for a test installation. Or write Armstrong Cork Co., Textile Products Dept., 3610 Arch St., Lancaster, Pa. Available for export.

ARMSTRONG'S ACCOTEX COTS

THE CASE OF THE MISSING BUILDER WHEEL

that resulted in reduced yarn breakage

MILL men consider the loss of the builder wheel as good-riddance. The HACOBA'S unassisted eye feeds and traverses so smoothly and with such unvarying tension that yarn breakage is rare. Particularly on rayons, will this one feature alone prove invaluable. Carrying the case to its conclusion, the four full bobbins are gently dropped in two stages, preventing fiber damage.

For further clues as to why the original HACOBA is the world's most popular winder, write for our eight page folder of technical data.

TRADE MARK

THE ORIGINAL HACOBA FILLING WINDER

winding 4 bobbins at one time

The HACOBA is FULLY AUTOMATIC, winding on every type of bobbin, pirn, tube or quill for any loom. When the bobbins are filled to a predetermined length, it stops, traps and cuts the thread, lowers bobbin into the tray, inserts new one and starts winding again — entirely without human aid. The HACOBA is an all round winder for cotton, worsted or rayon, even the bobbin size accommodation can be changed in 5 seconds.
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...by Pacific Mills

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The latest addition to the Sandoz line is

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which brings a solution to the problem of hard-to-make-fast green shades. Using this brightest and fastest-to-light of the Alizarine Light Blue series with XYLENE LIGHT YELLOW 2G as a base, you will have no trouble with the light stability of your bright greens. *Write us for a sample.*

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SANDOZ *thinks ahead with textiles*

SANDOZ

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GETTING THE MOST FROM WINDING

Information about winding designed to show improvements in winding equipment and new ideas in the winding operation

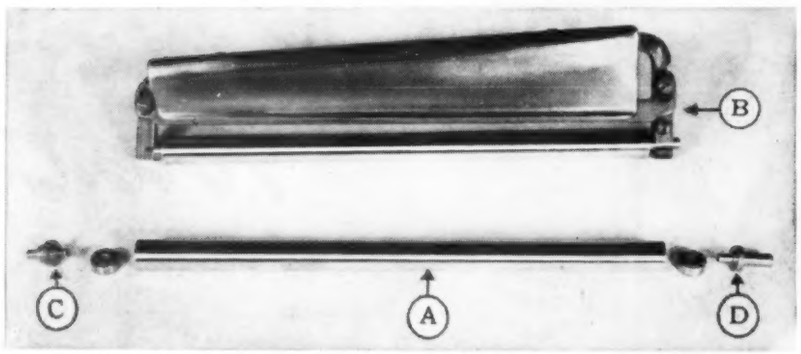

Fig. 1. New roller bail for Pineapple Coning attachment (below) with present bail holder (above).

IMPROVED ROLLER BAIL for No. 50 Pineapple Coner

The Pineapple Coning attachment which has proved itself highly satisfactory for the coning of filament yarn on the No. 50 Winder has recently been improved upon by the development of a new roller bail which revolves on shielded ball bearings.

This new roller bail reduces maintenance because the shielded ball bearings require neither oiling nor readjustment after the initial installation has been completed. It improves the quality of winding because it revolves more freely upon these bearings.

The bail (A in Fig. 1) is slightly longer than the one now in use, but can be used with the type of bail holder (50-2922-10P3X—B in Fig. 1) on existing machines. It is supplied with ball bearings and studs (C) and (D) already assembled. Instruction sheets have been prepared to facilitate making the change which can easily be made by the fixer or mechanic in charge of the winding area.

HOW TO REPLACE LOCKING POINTS on No. 50 Winder

The locking points on the No. 50 Winder (Fig. 2) are made in such a way that they can be turned around to present a new locking surface when one surface has become worn.

Fig. 2—Locking points on No. 50 Winder

The locking pin on the brake lever has *four* locking surfaces. It is attached to the brake lever by a nut and washer. When one surface has become worn, the pin can be turned to present a new surface simply by removing the nut and washer and turning the pin 90 degrees.

The locking plate on the dogging segment has *two* locking surfaces, one at either end. It is riveted to the segment, so that when one of the surfaces has become worn, the rivet must be removed in order to reverse the plate and present a new surface.

This operation requires a certain amount of care because if done incorrectly the dogging segment might be broken. The hole in the segment (Fig. 3) is counter-sunk; so if the rivet head is merely ground off and an attempt made to force the rivet out of the segment, the stock of the rivet which is swedged into the head of the segment will cause it to break at its weakest point.

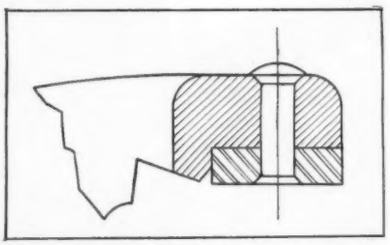

Fig. 3—Cross-section of dogging segment shows how locking plate is attached by rivet in countersunk hole.

The correct method of releasing the locking plate is to grind off the rivet head and then drill down into the rivet approximately ¼ in. with a 3/32 in. drill. This releases the pressure at the head of the rivet where it is peened into the countersunk portion of the segment. The rivet can then be removed without any undue strain on the segment.

When re-riveting the plate to the dogging segment, the plate should be held flat on a mandrel to prevent breakage.

*Reg. U.S. Pat. Off.

23.9.2

September 1949

WINDING AND TWISTING MACHINERY FOR NATURAL AND SYNTHETIC YARNS

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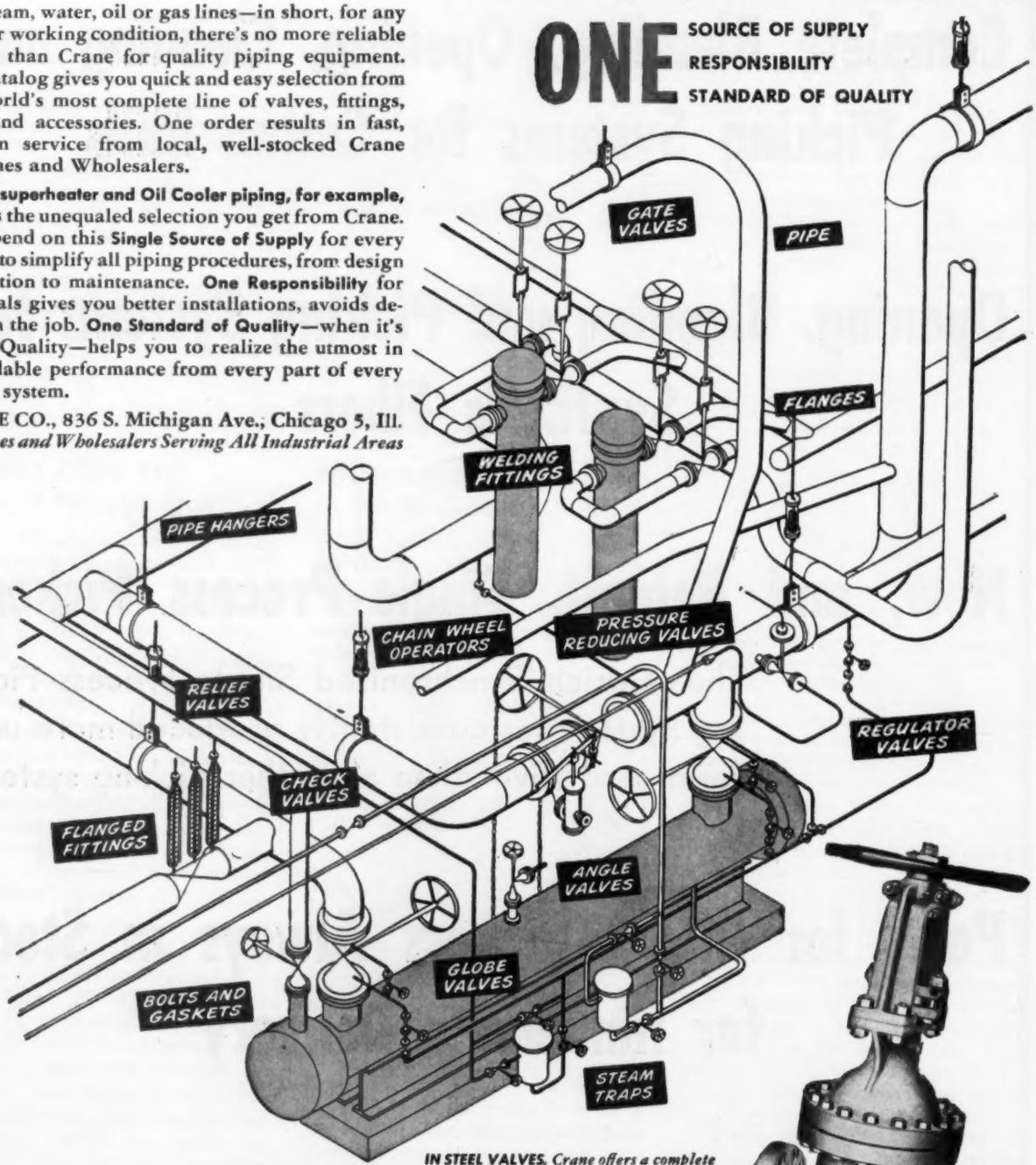

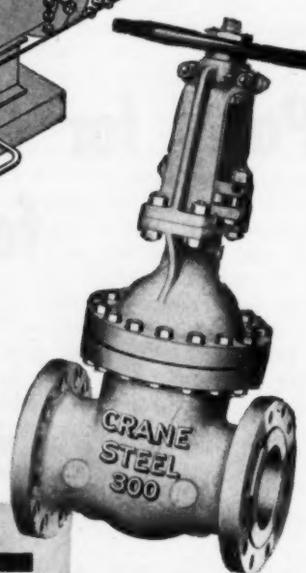

IN STEEL VALVES, *Crane offers a complete line . . . gates, globes, angles, checks . . . in all patterns and sizes . . . in pressure classes from 150 to 1500 pounds. Shown here, Crane No. 33X 300-pound Cast Steel Wedge Gate, trimmed to handle temperatures up to 900 deg. F. Flanged, screwed or welding ends. See your Crane Catalog, p. 304.*

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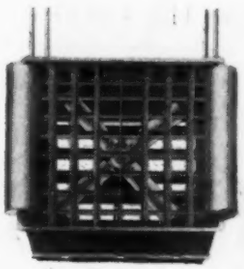
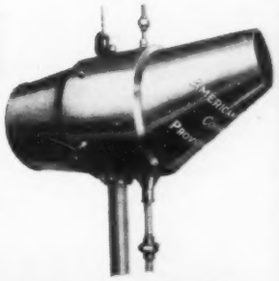
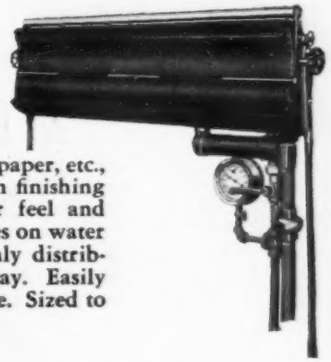


Amco Atomizers and Cooling Units in a Spinning Area.



AMCO AMTEX HUMIDIFIER. A self-contained unit designed for small areas, such as laboratories, where exacting conditions are to be maintained. No compressed air required.



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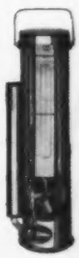

AMCO ELECTRO PSYCHROMETERS. An electrically driven fan draws air over wet and dry thermometer bulbs to provide extra accuracy of readings where space does not permit use of sling psychrometer.

AMCO SLING PSYCHROMETER in protective casing. A convenient size for mill use. Thermometers are carefully calibrated and have magnifying type tubes for easy reading.

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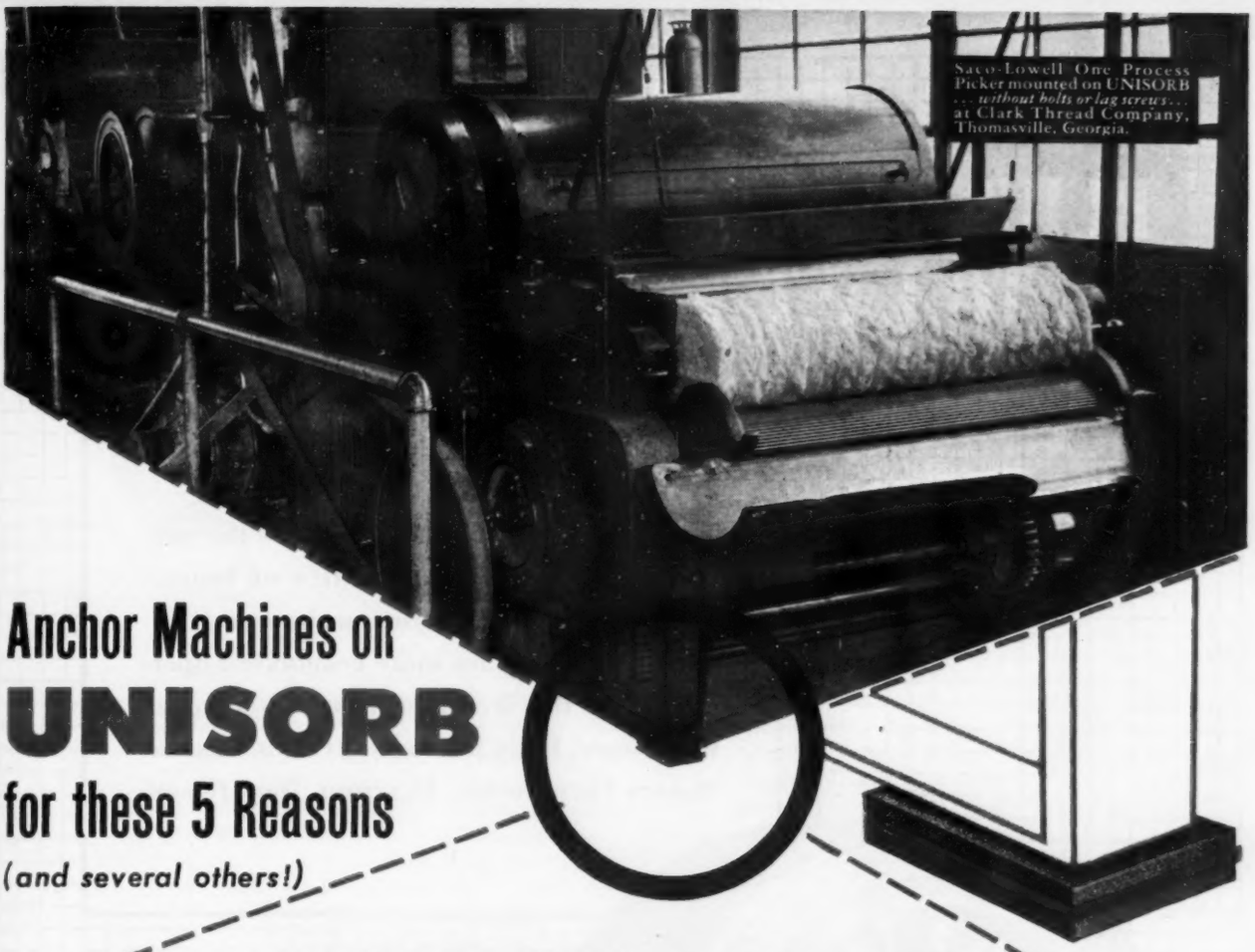

Saco-Lowell One Process Picker mounted on UNISORB ... *without bolts or lag screws* ... at Clark Thread Company, Thomasville, Georgia.

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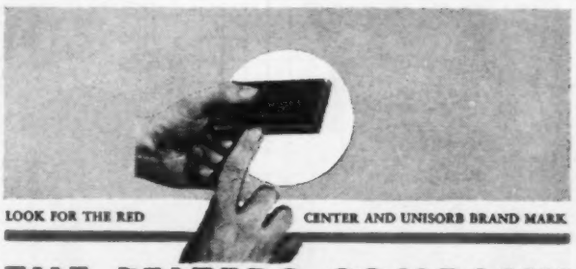

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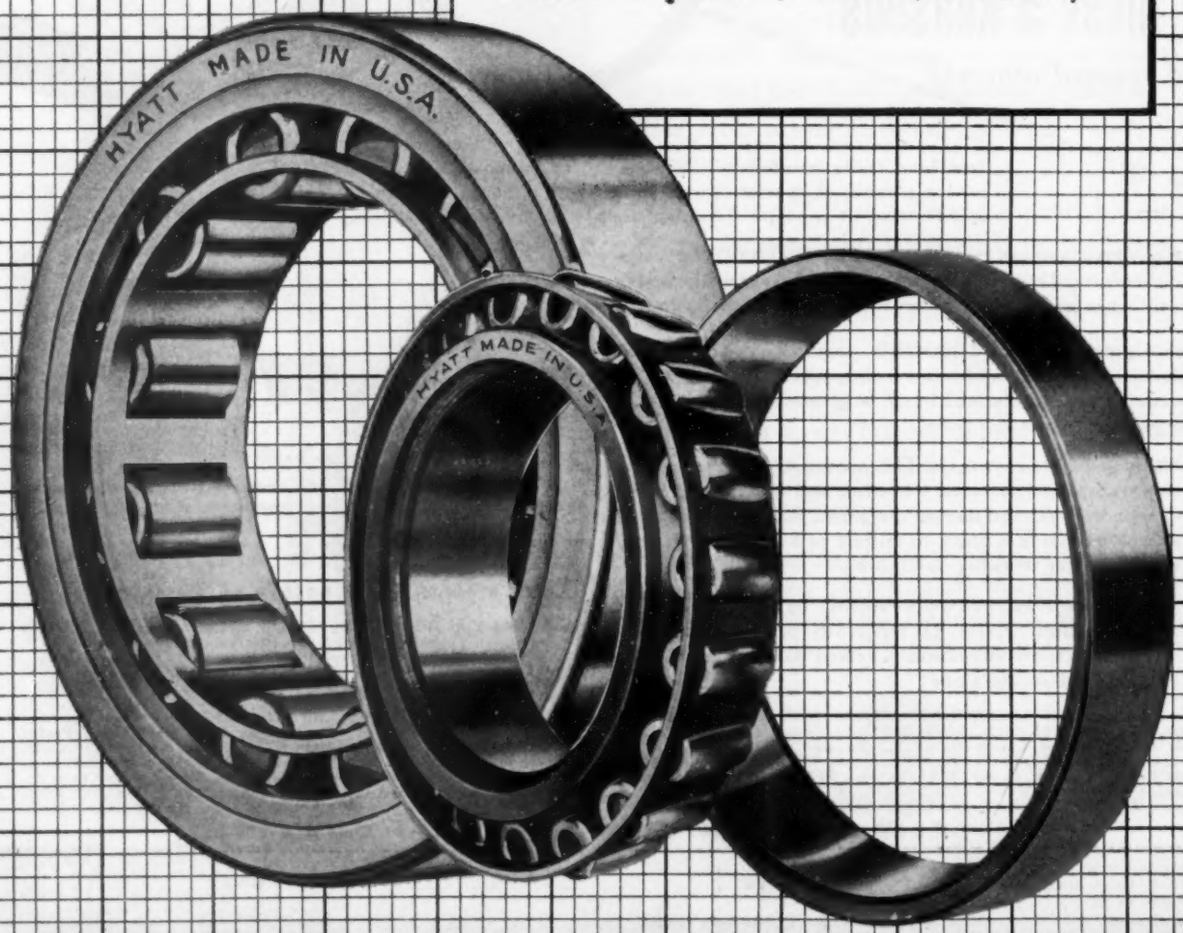

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Announcing PARNOL

More than just a highly effective detergent—a surface-active agent of exceptional merit as well.

In the dyeing and finishing of textiles, PARNOL is already proving the value of its unique combination of exceptional wetting properties and high detergent characteristics. It is an anionic dodecyl-toluene sulfonate whose molecular structure maintains that hydrophilic-lipophilic balance so necessary for efficient, economical processing of materials.

PARNOL is a spray-dried, free-flowing, non-hygroscopic white powder with little or no odor, stable in acid or alkali solutions of percentages encountered in textile manufacturing. It produces exceptionally high and lasting foam in either hard or soft water.

As the typical analysis shows, PARNOL has an unusually high percentage of active matter. Its effectiveness, both as a wetting agent and as a detergent, is shown by the Draves and the Ross-Miles tests, given below. Its detergent powers in hard and soft water are further evidenced by reflectance measurements in Launderometer tests.

Full information and samples will be sent on request.

A TYPICAL ANALYSIS

Active Matter	41.25% (Dry basis)
Inorganic Salts (principally Na_2SO_4)	58.20% (Dry basis)
Unsulfonated Material	0.55% (Dry basis)
Moisture	1.70%
pH (1% solution)	7.50

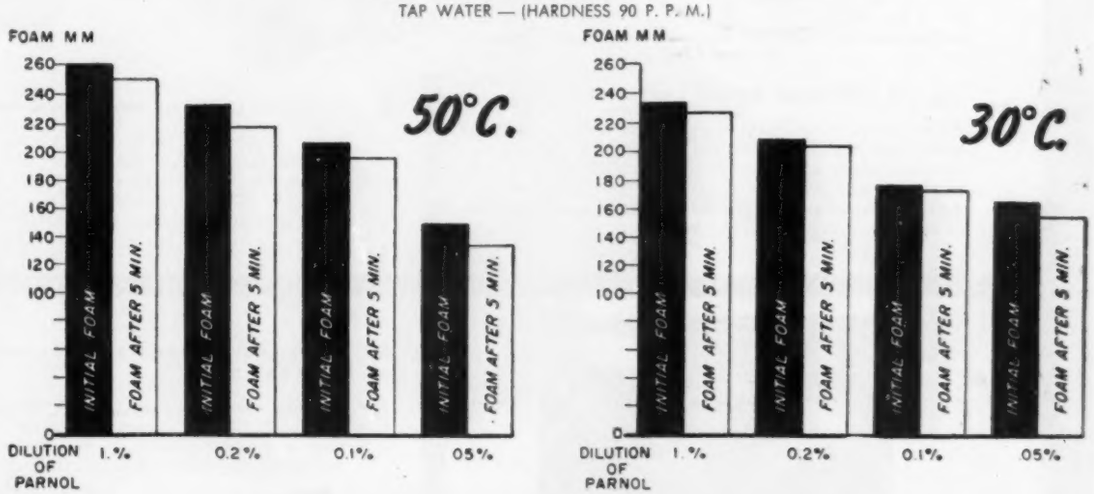
DRAVES WETTING TEST

TAP WATER — (HARDNESS 90 P. P. M.)

DILUTION	TIME
0.25%	6 sec.
0.20%	10 sec.
0.15%	12 sec.
0.10%	15 sec.

ROSS-MILES TEST

TAP WATER — (HARDNESS 90 P. P. M.)



For full information on PARNOL and sample, send the coupon below.

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☐ I would like test sample for use in.....
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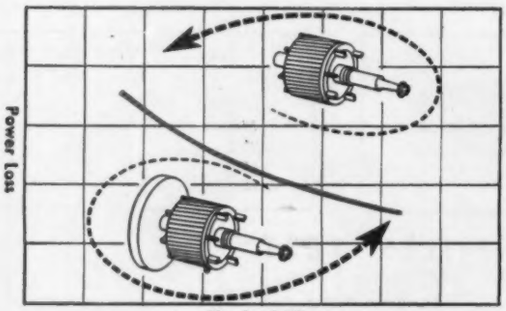
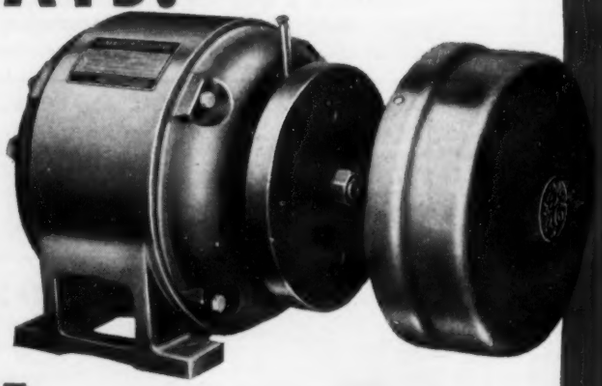
the new G-E flywheel loom motor

cuts loom operating costs 4 WAYS!





1. IT CUTS YOUR POWER COSTS!

Where a study indicates the need for a motor with additional flywheel effect, a *standard* General Electric loom motor with a flywheel integrally mounted will give you worthwhile power savings. As the chart shows, it reduces the peaks and valleys of the motor input, thereby cutting power losses.

2. IT CUTS THE SIZE OF MOTOR YOU NEED!

Often, a flywheel permits the use of a motor one size smaller than would be possible with a conventional loom motor. On the other hand, increased loom speed can be obtained without using a motor of greater horsepower.

3. IT PERMITS INCREASED PRODUCTION

With a flywheel on its shaft, a 1200 rpm motor may deliver performance equivalent to that of an 1800 rpm motor. This allows changing loom speeds in smaller increments and the use of stronger pinions—both well-recognized benefits.

4. . . . *and* IT ACTUALLY IMPROVES LOOM PERFORMANCE.

In mills where General Electric flywheel loom motors have been installed, reports indicate that a flywheel loom motor improves loom performance—loom fixers like the better "feel."

Ask your G-E sales engineer and your loom manufacturer about this new loom motor or, write for Bulletin GEA-5011B. Apparatus Dept., General Electric Co., Schenectady 5, N. Y.

TOTALLY ENCLOSED LOOM MOTORS

GENERAL ELECTRIC

For bright bluish rubine shades on acetate or nylon . . .

ACETAMINE* Rubine 3B has good light fastness . . . very good fastness to both dry and wet crocking . . . hot moist pressing . . . good resistance to washing . . . dry cleaning and sublimation.

The blue shade of this direct dyeing acetate color recommends its use as a base for a wide range of wines, clarets, bordeaux and maroons

"ACETAMINE" Rubine 3B produces speck-free prints by the usual printing methods. Suitable for dress goods, draperies, and other decorative fabrics.

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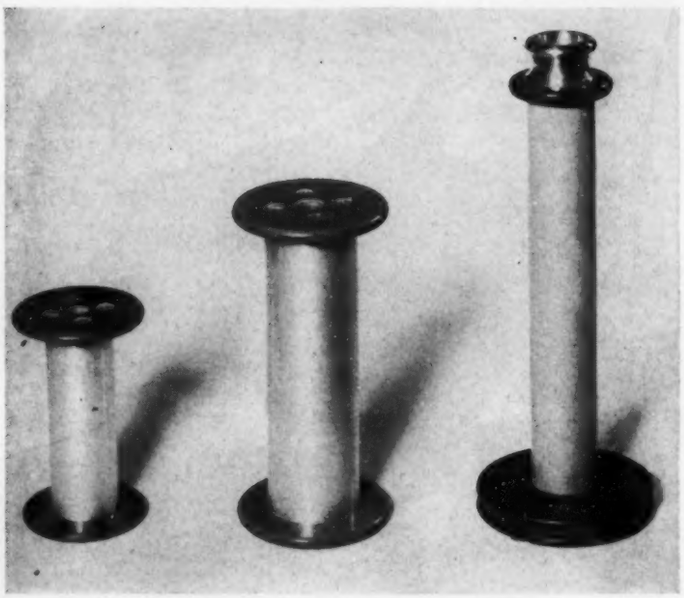
—because Lestershire Unit Construction (Pat. applied for) assures concentricity, you get longer spindle life and longer bobbin life at today's high spindle speeds.



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Barrel and all parts are finished with a tolerance of .001 and locked permanently in place, centered on the spindle bearings.

All materials used are stable materials of uniform density, impervious to moisture or usage changes, trouble-free for nylon.

It's an engineered construction that makes certain of long bobbin life and protection for your costly spindles.

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Write for descriptive details of Lestershire Unit Construction Bobbins

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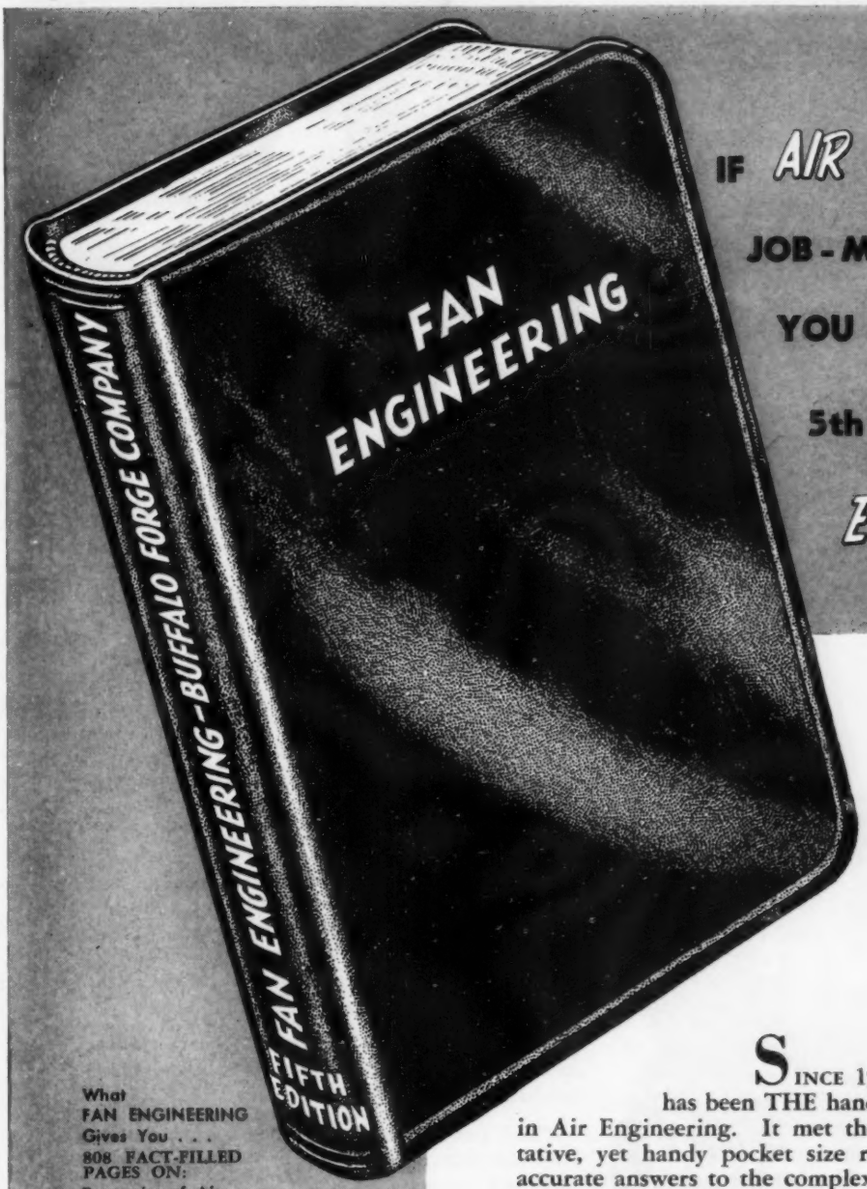

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Today, when speeded-up processes in worsted yarn manufacture tend to promote static, you'll find Nopco 1656-R an ideal trouble killer.

Fibers treated with this specifically formulated oil remain static-free throughout carding, gilling, combing and drawing operations.

You'll avoid "wild" and broken ends, produce even-running, quality yarn with this new, antistatic lubricant.

Nopco 1656-R also ***eliminates*** oxidation, and ***reduces*** soap costs 75%. In fact, this remarkable new oil enables the worsted manufacturer to obtain exceptionally good results—comparable to those achieved by users of famous Nopco FUA oil for processing wool.

Yes, Nopco 1656-R means HIGH QUALITY WORSTED YARNS PRODUCED ECONOMICALLY . . . and in these competitive days what is of more importance to you?

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Today, through Jenkins PROMPT SERVICE mills profit still further. Enlarged plant facilities, the most modern equipment, and highly efficient workmen assure you not only the best materials and highest skill but the *quickest possible delivery* of new or rebuilt spinning and twister frame cylinders, picker and card screens, and other textile specialties.

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complete color range brilliant shades of red, scarlet, orange, yellow, green, blue, violet, brown and black.

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C&K C-LOOMS

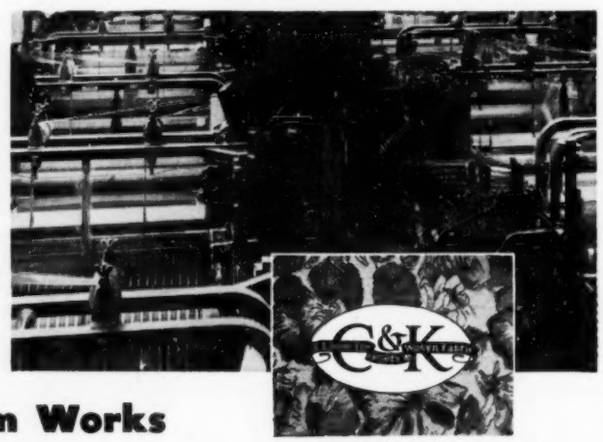
give the kids a big send-off ... back to school!

How close to every thrifty mother's heart are the *abusable, refreshable* products of C&K C-Looms for junior and his sis . . . everything from handkerchiefs and scarves and ties, to dress goods and shirtings and suitings, to towels and curtains and blankets!

Yes, C&K C-Looms weave cotton, spun rayon and blends into *all* these crisp, colorful fabrics, and many more besides. *For there's no end to C-Loom versatility.* Like most of the families who buy these hard-working fabrics, the C-Loom family is also big and husky . . . providing a loom to weave anything from the lightest ginghams to the heaviest upholsteries.

You can get C-Looms equipped with dobbies, head motions or cams. And, if you like, you can readily add a C&K Jacquard and go on into even brighter and more intricate fields of color and design. And what's more, *regardless of fibre content*, you get the exclusive C&K feature of 3-way convertibility to a 4x2 box automatic bobbin-changing loom for filling mixing (with tricolor feature) from either a 4x1 automatic bobbin-changing loom, or a 4x4 box non-automatic for pick-and-pick operation. Not to mention the choice of 4 types of Harness Motion, 4 types of Let-Off, 4 types of Take-Up, 3 types of Feeler Mechanism . . . and 8 choices of Bobbin Sizes from 7⅜" to 10⅛" with wound diameter up to 1⅝"

Only C&K C-Looms can weave such a fantastic range of high-styled fancy fabrics. **And this unmatched versatility is what *you* need to keep *your* mill competitive in the shifting quicksands of today's unpredictable market-trends. Come and see for yourself, *any time.***



This "Invisible Trademark" Stands Back of the Trademarks of the World's Finest Woven Fabrics

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You push your knitting costs **down** *and your sales* **up** *when you run*

STANDARD *Durene**

As many new Durene licensees are finding out, Standard Durene, superior mercerized combed cotton yarn, bears down on production costs and assures greater sales.

Made from *selected raw cotton under our complete control in our own plants,* Standard Durene is kept at top quality. Its free-running smoothness, greater uniformity, and lovely luster give you more garments per hour, win more sales faster.

Get the most of the big national Durene advertising campaign by knitting with Standard Durene—10's to 120's ply, natural, bleached and dyed. Specify it today.

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made of *Durene**
multi-ply mercerized combed cotton yarn
4 WAYS BETTER
than ordinary cotton yarns
EXTRA COMFORT
---more absorbent
EXTRA STRENGTH
---longer wear
EXTRA QUALITY
---lasting lustre
EXTRA SERVICE
---easy to wash

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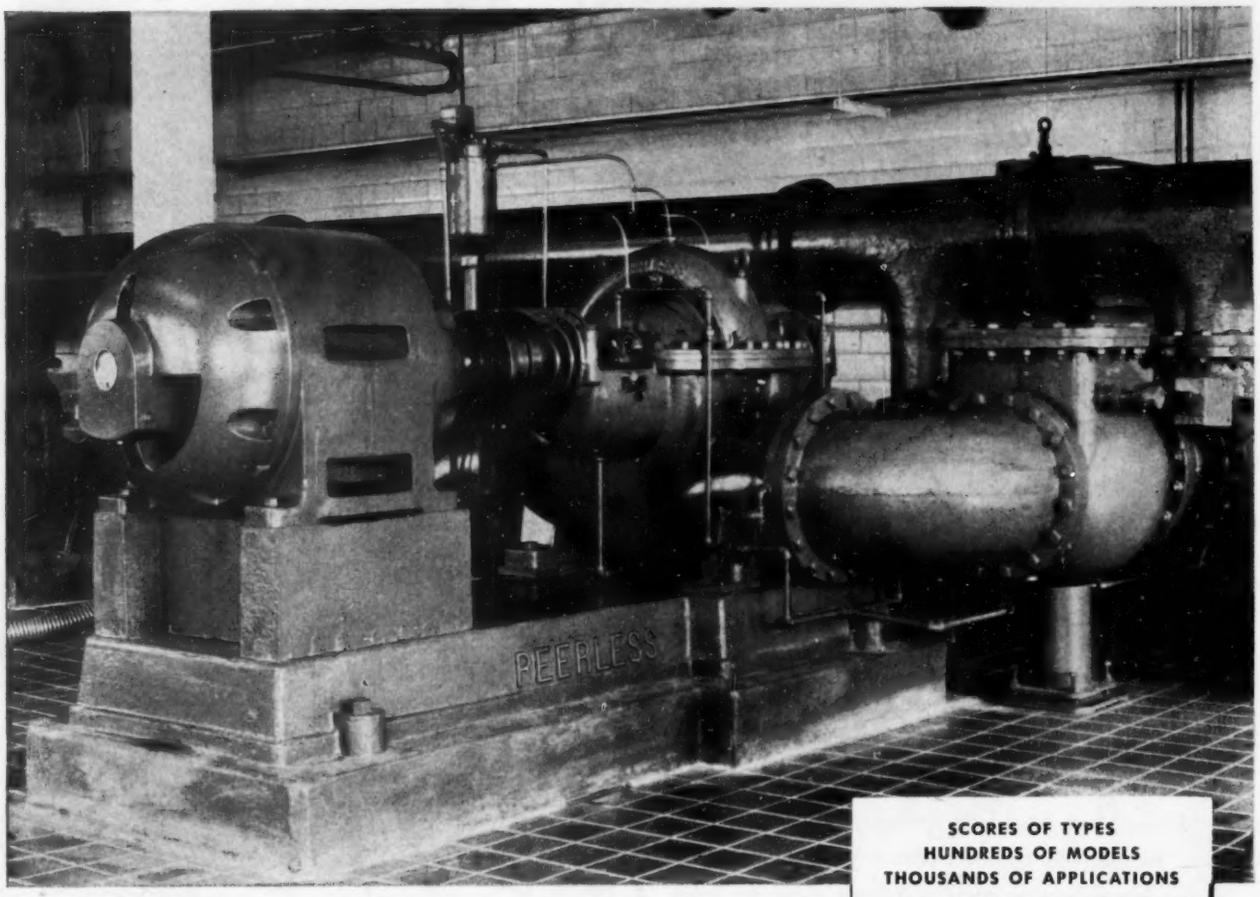

For continuous or intermittent duty in a host of diversified services

Select the pump you need for the process you use from the diversified line of Peerless horizontal pumps. The pump shown above, a Peerless general purpose pump handling plant process water, typifies a host of efficient Peerless centrifugal pumps which are boosting output and cutting costs for manufacturers and municipalities everywhere. With its comprehensive line of horizontal pumps Peerless can handle chemicals or alkaline liquids, pump clear water or solids in suspension. There are pumps for fluids at high temperatures or they can furnish water or foam for approved plant fire protection. Peerless will move volatile butane-propane or tricky caustics and acids. Pumps are available for all practicable heads and capacities. Duty can be continuous or intermittent. Construction materials are suited to the liquid being pumped. And, backing up their installation qualified Peerless field engineering service is available in all principal cities to see that each pump matches or exceeds customer expectations. Write today for pump engineering information on your process or service. The chart at right lists a number of the types of Peerless horizontal centrifugal pump bulletins in which you will be interested.

SCORES OF TYPES
HUNDREDS OF MODELS
THOUSANDS OF APPLICATIONS

Here are a few of the services which Peerless horizontal pumps can perform. Plan with Peerless. Request copies of the Bulletins you need by Bulletin number.

Pump Service	Bulletin No.
Water Supply	B-1300
Fire Protection	B-1500
Chemicals and Oils	B-810
Vaporous Liquids	B-2201
Butane-Propane	B-2200
Boiler Feed	B-806
Sewage and Solids	B-154
Hi-Pressure	B-310
Acids and Caustics	D-2400
Process Services	B-803
All-purpose Pumps	B-2301

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Pumps

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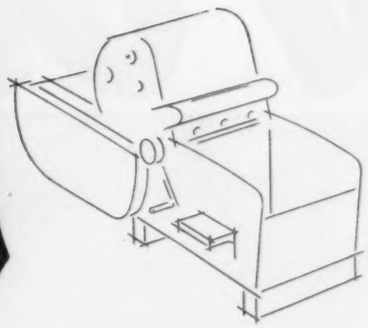
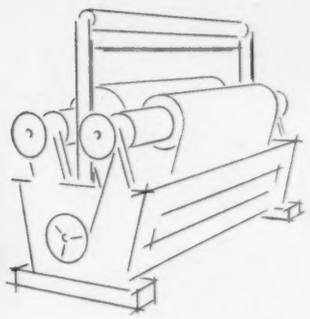
For these fibers... and these operations... use these detergents



SCOURING

Texscour Flakes, a low titer, pure red oil soap with easy solubility and rinsability.

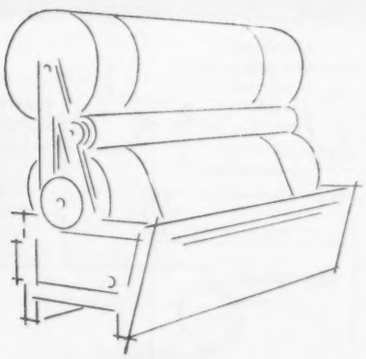
Triumph Synthetic, a low sudsing non-ionic, ready built powder with exceptional detergency.



DYEING

Regal Synthetic, a neutral alkyl aryl sulfonate with excellent wetting and detergent properties.

Energetic Synthetic, an excellent neutral, non-ionic liquid detergent with dye-leveling action.



FINISHING

Flint Chips, a neutral high titer pure soap, free from rancidity, with good lubricant qualities.

Certified Flakes, a vegetable fatty acid base soap with rapid penetrating and emulsifying properties.

Write today for Armour's handy reference chart to help you select the right soap or synthetic for each textile processing operation.

ARMOUR *Industrial Soap Division*

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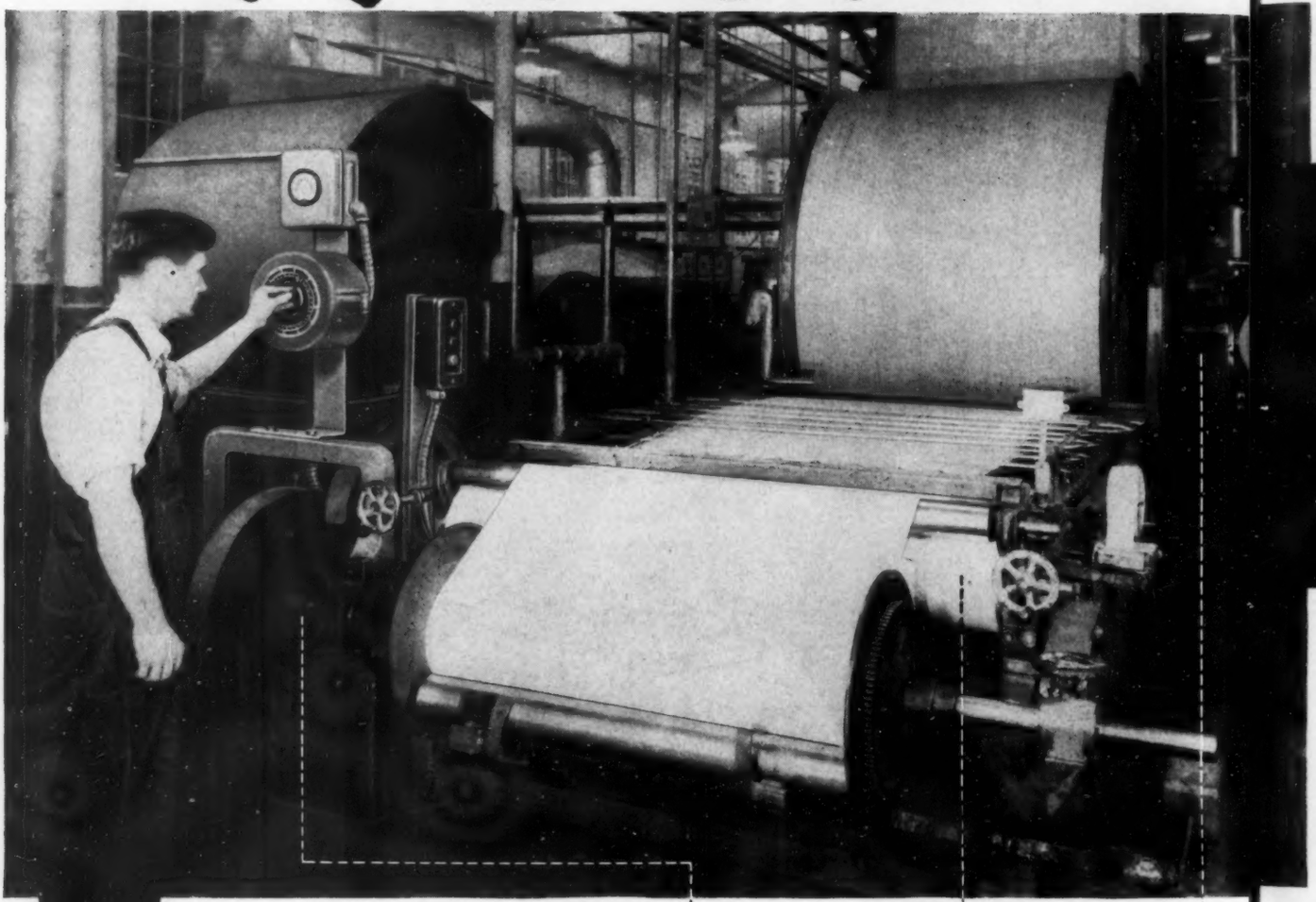
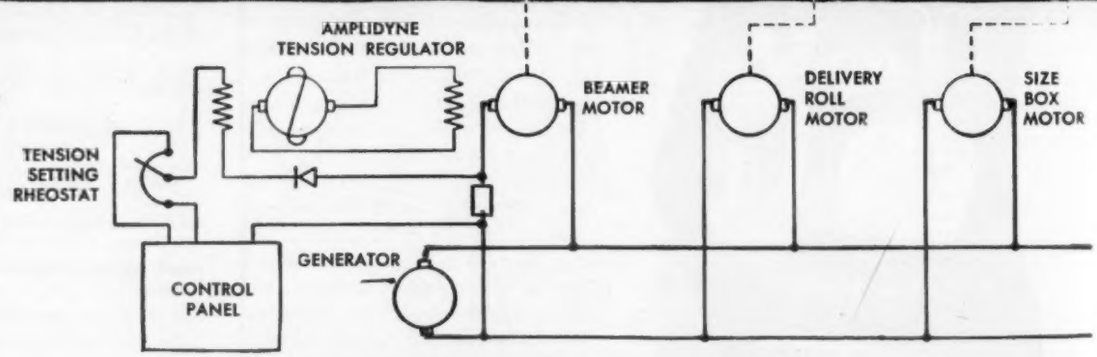
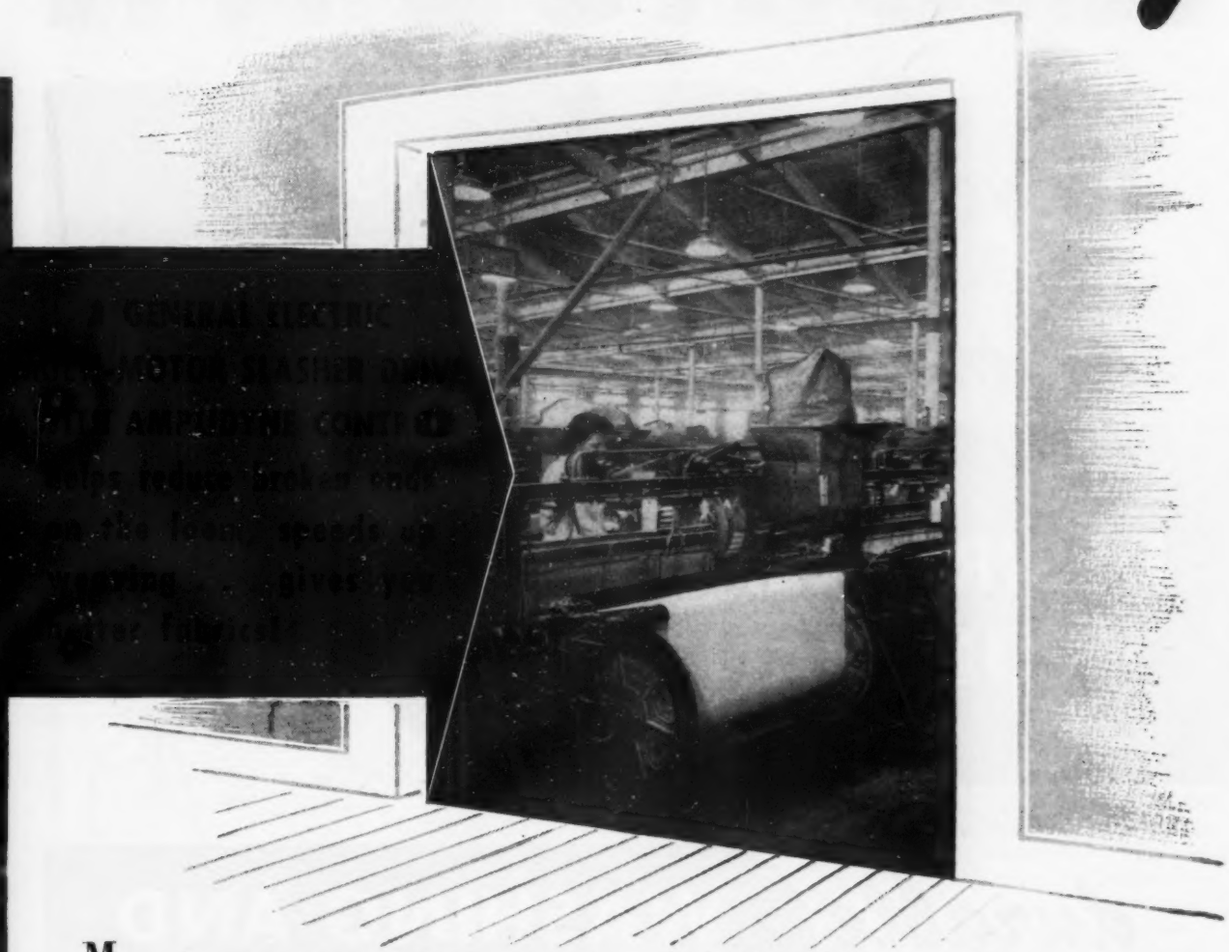




COMPONENTS OF A TYPICAL G-E SLASHER DRIVE

This simplified schematic shows the basic components of a typical G-E slasher drive with special emphasis on the beam motor and its control. As beam diameter builds up, the drive motor slows down automatically in order to keep yarn speed and yarn tension constant. This is accomplished by holding motor armature current constant during beam build up. Specific details on how this is done are contained in Bulletin GEA-5259. Write for your copy today!

...is in the weave room!



Many mill operators find that the "human error" factor combined with old-style drives and the limitations of mechanical arrangements is the cause of many difficulties which cut down weave room efficiency. Soft spots show up in the beam, ends break frequently, and yarn tension is irregular.

A General Electric slasher drive reduces these imperfections. Specifically, it gives you these important operating advantages:

1. **Tension is automatically regulated over the entire beam diameter build-up.**

2. **Any one of a wide range of preset tension values between the size box and delivery roll may be easily selected.**

3. **More yards per beam are made possible by uniform tension control.**

4. **Running speeds may be easily preset by adjusting a single rheostat.**

5. **Acceleration and deceleration is smooth and even to prevent tension variations or yarn damage.**

6. **A wide speed range is provided, up to 6 to 1, or higher if necessary.**

7. **A low, preset, creeping speed is available for quick, easy threading.**

8. **The G-E slasher drive may be easily tied in with automatic moisture control.**

9. **Maintenance of slip clutches, line shafts, and mechanical speed changers is eliminated.**

If you are considering a new slasher installation, it will pay you to discuss a G-E drive with your machinery manufacturer. Or, if you're modernizing, get in touch with your local G-E textile mill specialist. For more details, write for Bulletin GEA-5259, *Apparatus Dept., General Electric Company, Schenectady 5, N. Y.*

GE DRIVE SYSTEMS FOR TEXTILE MILLS

You can put your confidence in—

GENERAL ELECTRIC

654-5

KERANOL NK

gives **COTTONS AND RAYONS**

a very **DESIRABLE, SOFT, FULL HAND**

durable to **WASHING AND DRY-CLEANING**

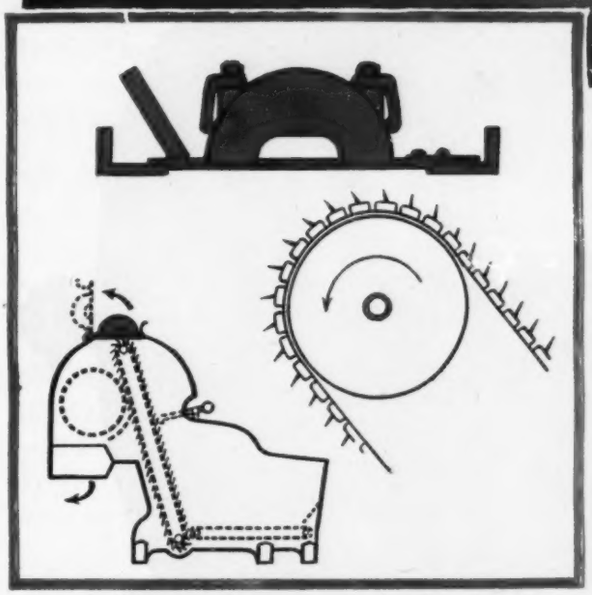
Unaffected by pH variations in the finishing bath—compatible with Resins—very resistant to yellowing, even at excessively high temperatures. Write for our technical service bulletin #208-110.1

IT'S AN Arkansas PRODUCT!

CO., INC.

NEWARK, NEW JERSEY

Eriez Magnets give more efficient and simplified MAGNETIC PROTECTION



1. Supporting angle iron.
2. Magnetic Separator in working position.
3. Magnetic Separator swung up for cleaning.
4. Handle for swinging back hinged Magnetic Separator.

The Eriez Magnetic Separator, shown above, is built for suspension over spiked apron feeders. This application assures superior cleaning results because the magnet is operating at a point where materials are opened and traveling at low speeds. Eriez Magnetic separation is simple. As material is conveyed to the top of the apron, it passes into the magnetic field where tramp iron is removed. Eriez magnets can be built any size required in order to fit existing or new machinery.

POSITIVE protection from fires and machinery damage caused by tramp iron is provided when Eriez non-electric permanent magnetic separators are installed in textile processing lines. The Eriez magnet is simple, requires no maintenance other than cleaning of collected trash. It is easily understood, maintained and installed by ordinary labor. There is no operating cost . . . The Eriez is light in weight, extremely flexible in design and economical in cost. It presents no additional fire hazard of its own to the process protected. The magnetic strength of Eriez Magnets does not diminish. It is permanent—the power is always there. No chance of electrical failure or human forgetfulness. Eriez Non-Electric Permanent Magnets are effective in removing Tramp Iron from all types of fibers. Submit your tramp iron removal problems to us, we will be glad to help in their solution.

Please send bulletin No. 104A and the following: TI-10

Data on Eriez Magnets for:
☐ Wool ☐ Cotton ☐ Worsted ☐ Other processing lines

Eriez data on: ☐ Gravity Conveyor ☐ Mechanical Conveyor
☐ Pneumatic Conveyor ☐ Equipment on Processing Machines

Name.....

Address.....City.....State.....

● *When It's Magnetic Protection . . . See Eriez First*

Pioneer of **PERMANENT** Magnetic Separation

ERIEZ MANUFACTURING COMPANY

1501 East 12th St. • ERIE, PA.

See our exhibit at the 22nd Exposition of Chemical Industries, Grand Central Palace, New York — November 28 to December 3, 1949

Heart of a Sweet -

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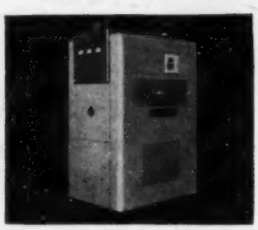
Other Money-Saving A-C Products for Textile Mills

TEXROPE V-BELT DRIVES

Most complete line of V-belt drive equipment backed by greatest engineering experience in the industry. New Vari-Pitch Automatic Sheave changes speed when motor is moved. One hand makes all changes without stopping machine. 100% speed range. 1½ to 40 hp.

DIELECTRIC HEATER FOR FAST DRYING

Allis-Chalmers dielectric heaters are setting new standards of speed and quality in rayon cake drying and twist setting. Heat any size or shape of textile package evenly from core to surface. Dries 1 pound cake of rayon in 30 minutes. Engineering and cost studies made without obligation.



Running Loom

Built to beat today's high maintenance costs... made to give you top output from both new and modernized equipment. Check these advantages:

☛ REDUCED BEARING MAINTENANCE
Factory lubricated and sealed ball bearings get just the right amount of the right grease. Run without attention for years. No cost for lubricant and lubrication over long periods of operation.

☛ SMOOTH RUNNING UNDER PULSATING LOAD
Motor is smooth running under constantly shifting loads of loom operation. Extra stiff cast iron frame resists distortion under strain and keeps bearings in perfect alignment.

☛ EXTRA OVERLOAD CAPACITY FOR BREAKING-IN
Allis-Chalmers Loom Motors have the extra power needed for efficient operation during the stiff break-in period. You get full production immediately from looms equipped with Allis-Chalmers Loom Motors.

For Modernization or New Looms

When modernizing to increase production and to lower cost . . . or when buying new looms . . . specify Allis-Chalmers Loom Motors for that smooth "sweet running" sound that means efficiency and higher profits. In sizes and speeds to meet your requirements.

Quick-Clean Textile Motors

Especially designed for general textile mill use, these Allis-Chalmers motors have wide open air passages, smooth internal surfaces and efficient fans that blow out lint and dirt. They will not clog and overheat. Sealed bearings protect surroundings from grease, require no attention for years. Sizes to suit the usual requirements of spinning frames, twisters, etc.

A-2830

Texrope, Quick-Clean, and *Vari-Pitch* are Allis-Chalmers trademarks.

Ask for Free Bulletins and Engineering Information

Get complete information on these and other cost-saving A-C products for the textile industry. *Write for these free bulletins today.*

Allis-Chalmers Loom Motors 51B7111
Texrope Drives 20B6051
Vari-Pitch Automatic Sheave 20B7223
Dielectric Heater 15B6431

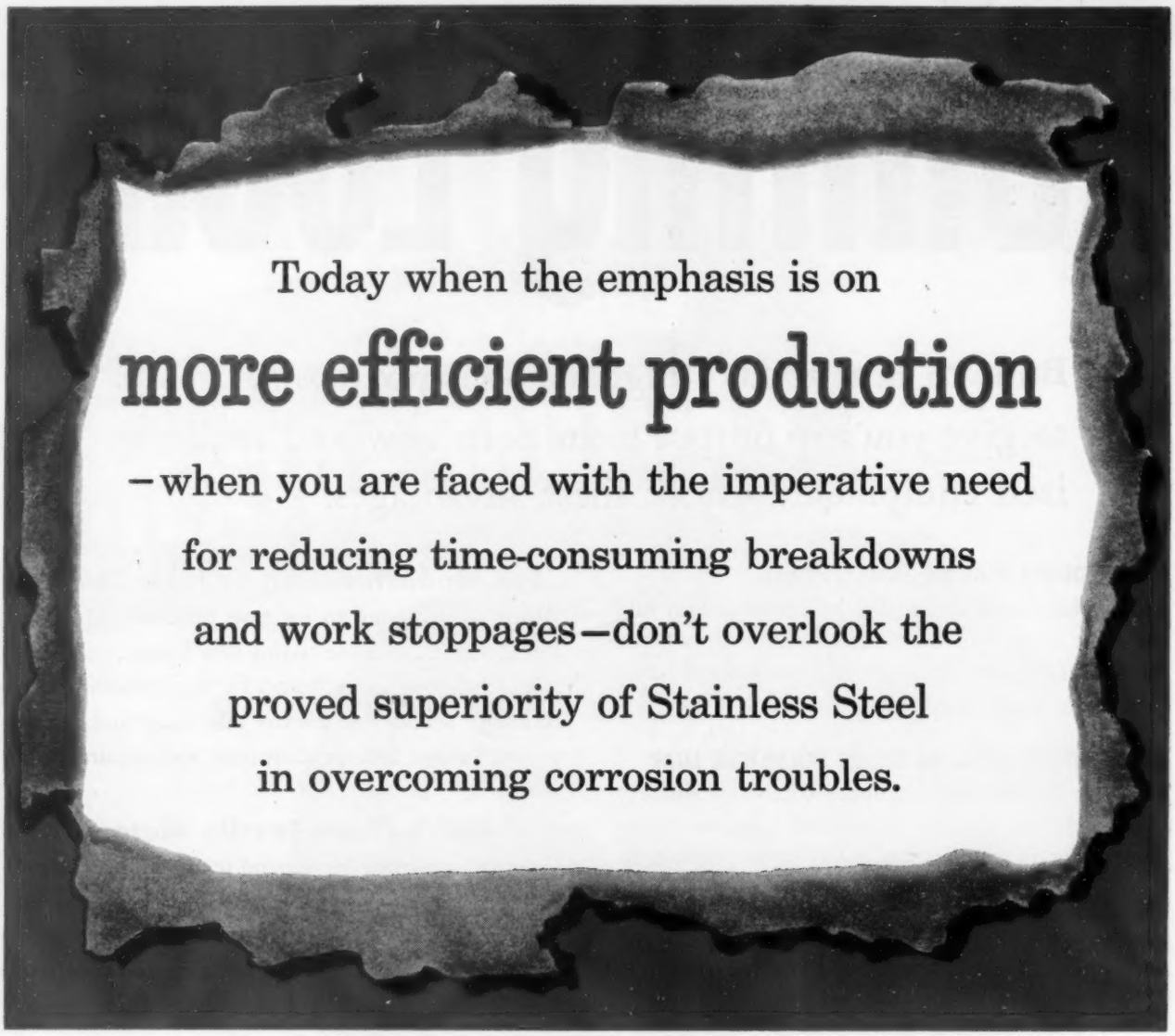
Power Generating Equipment, Transformers, Circuit Breakers, Power Distribution Equipment 25B6150

ALLIS-CHALMERS, 1054A SO. 70 ST.
MILWAUKEE, WIS.

A-C ALLIS-CHALMERS

ALLIS-CHALMERS

Originator of the Multiple V-Belt Drive for the Textile Industry


Today when the emphasis is on
more efficient production
—when you are faced with the imperative need
for reducing time-consuming breakdowns
and work stoppages—don't overlook the
proved superiority of Stainless Steel
in overcoming corrosion troubles.

NOT ONLY does Stainless Steel offer superior resistance to more types of corrosives than any other commercial metal, but where high temperatures and pressures are involved in which resistance to oxidation and retention of strength are imperative—Stainless Steel will most often meet requirements.

In U·S·S Stainless Steel we offer you a group of perfected, service-tested Chromium and Chromium-Nickel Stainless Steels that are available not only in many different analyses but in the most complete range of forms, sizes and surface finishes available anywhere.

To help you apply these superior corrosion-resisting and heat-resisting steels most economically, our stainless steel specialists are at your service. The research facilities of the world's largest producer of fine steels stand behind them.

AMERICAN STEEL & WIRE COMPANY, GENERAL OFFICES: CLEVELAND, OHIO · CARNEGIE-ILLINOIS STEEL CORPORATION, PITTSBURGH & CHICAGO
COLUMBIA STEEL COMPANY, SAN FRANCISCO · NATIONAL TUBE COMPANY, PITTSBURGH · TENNESSEE COAL, IRON & RAILROAD COMPANY, BIRMINGHAM
UNITED STATES STEEL SUPPLY COMPANY, WAREHOUSE DISTRIBUTORS, COAST-TO-COAST · UNITED STATES STEEL EXPORT COMPANY, NEW YORK

USS

U·S·S STAINLESS STEEL

SHEETS · STRIP · PLATES · BARS · BILLETS · PIPE · TUBES · WIRE · SPECIAL SECTIONS

9-742

UNITED STATES STEEL

Windows of Frosted *Aklo* Glass in this Richmond, Va., textile plant reduce glare and retard sun heat. Better seeing—more pleasant working conditions.

More comfortable to see . . . more comfortable to work

FILTERED DAYLIGHT

The kind of daylight you get in your plant depends on the kind of glass in your windows. You can provide abundant daylight, without annoying glare or excessive solar heat, with Blue Ridge Frosted *Aklo** Glass.

Reduces Glare—No need to paint glass or hang shades. Let the sunlight come in—softened and diffused by blue-green Frosted *Aklo* Glass. More eye comfort—better seeing—better workmanship and happier employes.

Retards Sun Heat—*Aklo* Glass excludes solar heat. Interiors are cooler—workers more comfortable. Load on air conditioning is effectively reduced. Temperature and humidity can be more accurately controlled.

Aklo is made by the Blue Ridge Glass Corporation of Kingsport, Tennessee, and sold by Libbey-Owens-Ford glass distributors. To see for yourself how Frosted *Aklo* Glass reduces glare and sun heat, ask your distributor for a Radiometer demonstration.

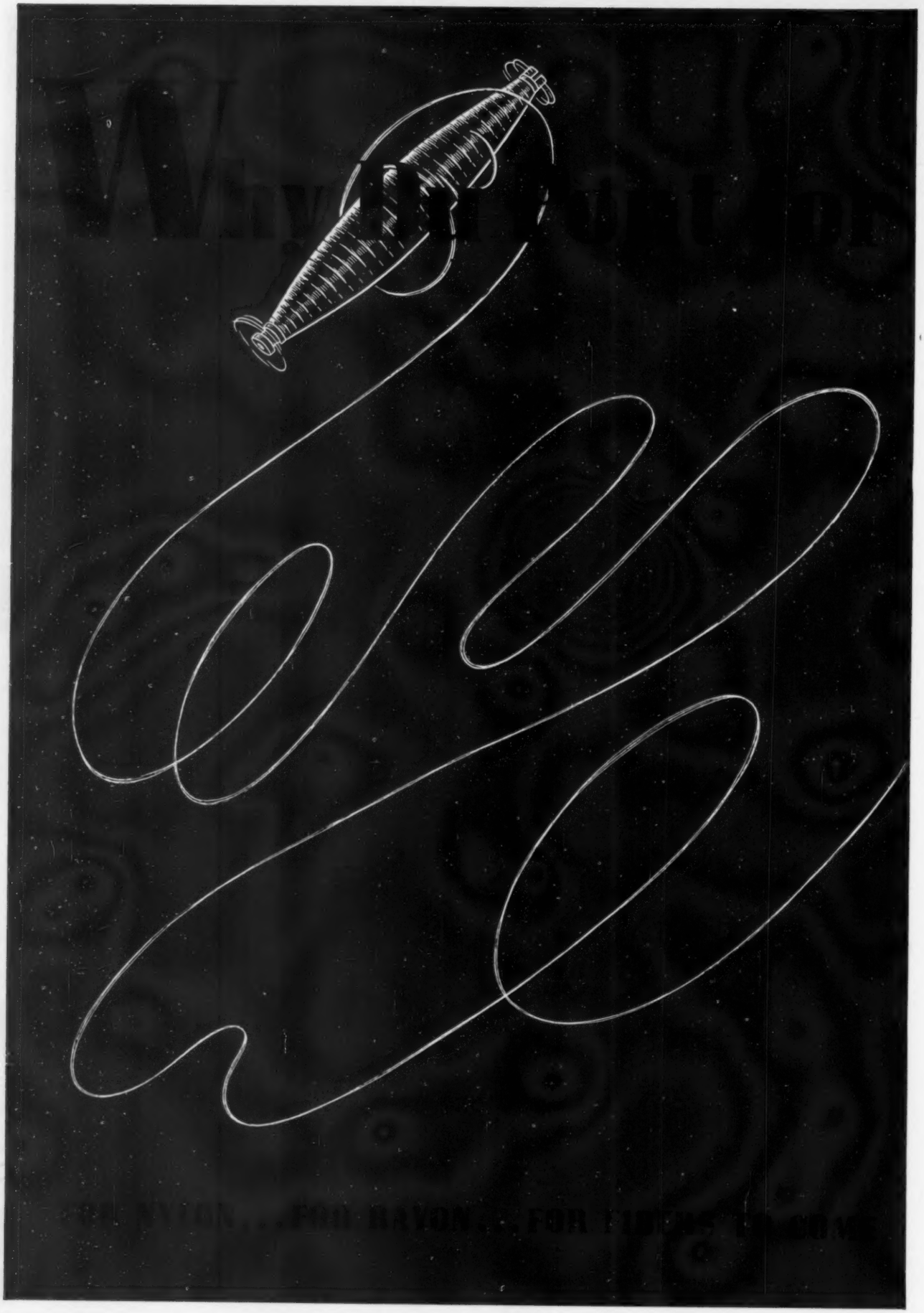
*®

Free Book on Reduction of Sun Glare and Heat

Write to Blue Ridge Sales Division, Libbey-Owens-Ford Glass Co., 92109 Nicholas Building, Toledo 3, Ohio.

BLUE RIDGE AKLO GLASS

Heat Absorbing • Glare Reducing • Figured and Wire Glass



Textile Fibers?

Research... A NON-STOP JOB

Fiber research never ends at Du Pont. Successful, established fibers and brand-new fibers are constantly tested and improved—for dyeing, for tensile strength, for blending.

Today as yesterday Du Pont Acetate Rayon remains the "luxury yarn of fashion"—loved by designers and textile men because it has such a luxurious "hand," because it has a subdued but very lovely luster of its own, because it cross-dyes handsomely and gives extra brilliance to any color the textile designer longs for, because it blends happily with any natural or man-made fiber—and because it has been the basic fiber of so many fabric successes.

ACETATE DIVISION • NYLON DIVISION • RAYON DIVISION
Rayon Department
E. I. du Pont de Nemours & Co. (Inc.), Wilmington 98, Delaware

DU PONT
REG. U.S. PAT. OFF.

BETTER THINGS FOR BETTER LIVING . . . THROUGH CHEMISTRY

think of Speed Control -and you think of Reeves

To insure perfect control of shrinkage of cloth, of whatever fabric is being preset with this new Van Vlaanderen Boil-Off Machine, five REEVES Speed Control units are used. A REEVES Motodrive varies the speed through the entire range, as desired, and four small REEVES Transmissions drive the four pairs of drums.

As pioneers in the field of speed control engineering, REEVES has "grown up" with the textile industry. In the many varied "steps" of processing yarn and the manufacture of cloth, the need for accurate variable speed control is a primary "must." The ability to change machine speeds for different kinds of yarn and fabric, or to vary temperature and moisture content, is absolutely essential for best results—and REEVES has kept pace with the industry's developments.

REEVES Speed Control, either manually or automatically operated, is accurate, infinitely variable. Speed changes are made instantly, without stopping the machine. Over 265,000 units now in service.

More REEVES Speed Control units are at work in textile plants throughout the country, than all other speed control devices put together. If speed control is involved, REEVES representatives and REEVES engineers know the industry's problems and how to solve them. Write for a man to call, or for new catalog T22-3-N.

REEVES PULLEY COMPANY · COLUMBUS, INDIANA

Recognized Leader in the Specialized Field of Speed Control Engineering

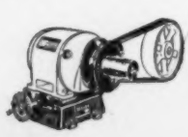
ACCURATE · VARIABLE

Reeves Speed Control

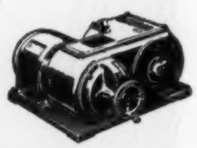
GIVES THE RIGHT SPEED FOR EVERY JOB!

THE THREE BASIC REEVES UNITS

VARIABLE SPEED TRANSMISSION for providing infinite, accurate speed flexibility over a wide range—2:1 to 16:1. Sizes—fractional to 87 hp.

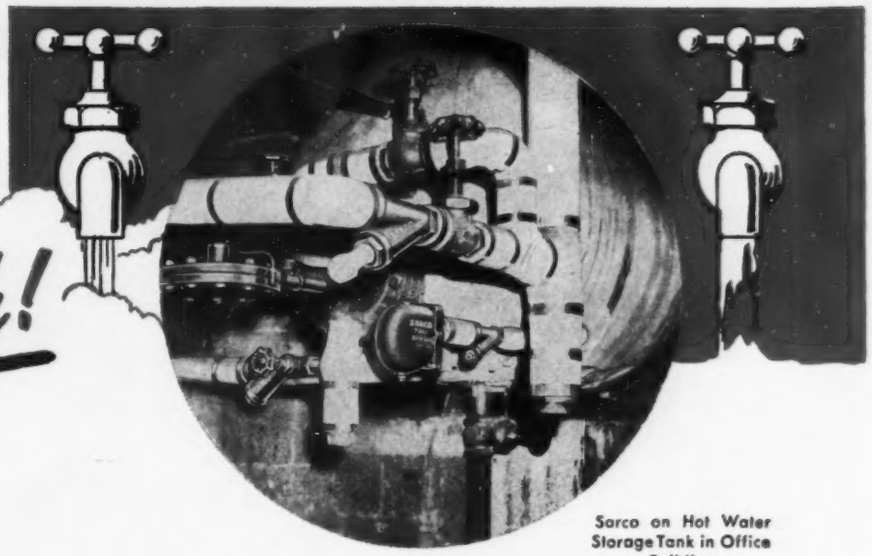


VARI-SPEED MOTOR PULLEY provides an instantly variable speed drive within 4:1 ratio for any constant speed motor. Sizes to 10 hp.



MOTODRIVE combines motor, speed varying mechanism and reduction gears in single unit. Speed variations 2:1 to 6:1 inclusive. Sizes to 20 hp.

HOT WATER COSTS— *too Much!*



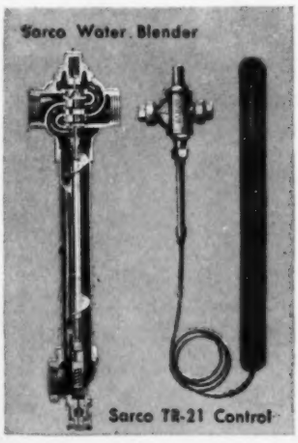
Sarco on Hot Water Storage Tank in Office Building

Sarco Blender in Apartment

WHEN IT IS TOO HOT OR TOO COLD

Hot water is a critical service, in buildings, in homes, or in industry. Poor service can be "explained" for a time. But when tenants get scalded, or workers "wait for it to warm up" because the water is too cold, things begin to happen that cost you money every day.

The strange thing is that the proper applications of Sarco Steam Traps, Temperature Controls and Water Blenders not only eliminate complaints, but result in lower fuel and water costs.



TANKS

If you have a storage tank—any one of several Sarco Trap-Control combinations will insure constant tank temperatures. Sarco never over heats—therefore it saves fuel. The Sarco 2430 Control shown above is one method.

APARTMENT

The phone rang all day and the boss wanted to install an additional tank. We put in a Sarco Blender at a cost of less than a dollar per apartment — now no complaints and much less water is wasted waiting "for it to get right."

INDUSTRIAL APPLICATION

The Sarco Water Blender is doing a good job in industry too. It insures exact temperatures at the point of use. In foods, it saves raw materials and rejected batches by having the water just right at the cooker or mixer. It is used for recirculating brine and cooling water in engines and compressors, and is the standard for wash rooms and gang showers. Bulletin No. 800.

254

SARCO SAVES STEAM

SARCO COMPANY, INC.
Represented in Principal Cities
Empire State Building, New York 1, N. Y.
SARCO CANADA, LTD., TORONTO 5, ONTARIO

IMPROVES PRODUCT QUALITY AND OUTPUT

Get more uniform results from wet decating

Illustration shows 3 Foxboro "Packaged" Control Panels on David Gessner Co. (Worcester, Mass.) wet decating machines in a large New England woolen mill.

with this ADVANCED-DESIGN AUTOMATIC CONTROL

Here's the latest development to help you make wet decating more precise and easier to handle than ever before. Foxboro's Automatic Control System now provides an important improvement in the heat treating cycle. It starts the timing after the fabric reaches correct temperature instead of at the time steam is first turned on. This means full, top-level heat for every part of fabric ... assures maximum uniformity of results.

SIMPLE SET-UP

Only three simple settings are required at the start of a run, no matter whether run lasts hours or days. Settings easily varied to meet changes in formula.

PUSH-BUTTON OPERATION

Once the settings are made and a master switch thrown, all the operator does is push a starter button. This automatic control then performs 16 separate operations ... all precisely timed ... to complete the process.

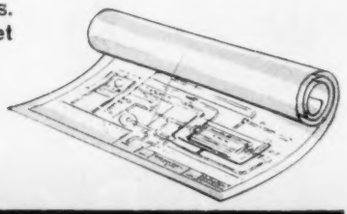
EMERGENCY-PROOFED

Pushing master switch lever to "OFF" closes all valves and stops process. Returning master switch lever to "ON" resets all timers to beginning of cycle.

COMPLETE PRODUCTION RECORD

In addition to more efficient control, this Foxboro system provides a complete production record. Chart drive by-passes master switch allowing chart to keep running.

Foxboro Automatic Wet Decating Controls are available as "packaged" control units for either new or existing machines. Write for complete details. **The Foxboro Company, 18 Neponset Avenue, Foxboro, Mass., U. S. A.**



SEND FOR ... detailed diagram of Foxboro advanced-design, automatic wet decating control installation ... or similar installation diagrams of Foxboro semi- or full-decating control.

FOXBORO REG. U. S. PAT. OFF.

RECORDING · CONTROLLING · INDICATING **INSTRUMENTS**

wherever color is used

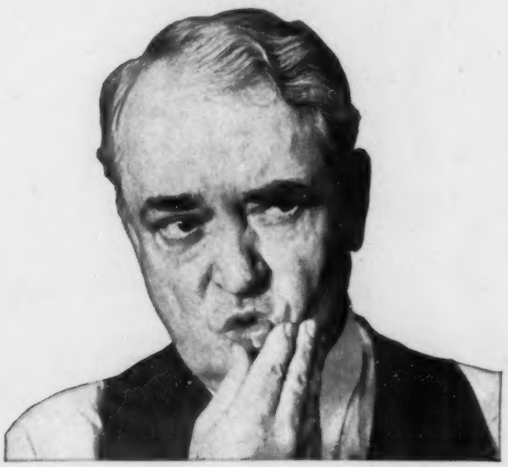
Specify *National Aniline Dyes*

For Complete Satisfaction on Dyestuffs, Formulas and Application Service in your Mill

NATIONAL ANILINE DIVISION • ALLIED CHEMICAL & DYE CORPORATION

40 RECTOR STREET, NEW YORK 6, N.Y. BOSTON • PROVIDENCE • PHILADELPHIA • CHICAGO • SAN FRANCISCO • PORTLAND, ORE. GREENSBORO • CHARLOTTE • ATLANTA • NEW ORLEANS • CHATTANOOGA • TORONTO

WHERE CAN YOU USE THESE



NEW, "DIFFERENT" RESIN FINISHES?

Is there a question in your mind as to whether the finishing material you are using — be it starch, gum or resin — is the best for your needs?

Is the finish "permanent"? Will it stand up under repeated washings? Will it mix well with softeners?

To get the best answer, may we suggest you look into a new line of thermo-plastic resin finishes recently announced by E. F. Houghton & Co.? They provide finishes ranging from a crisp, starchy feel to an extremely soft hand.

"RESONET" is the name. There are four products in the series, possessing these general advantages: durable . . . compatible with starches and most softeners . . . easy to apply . . . rapid in penetration . . . excellent for backfilling . . . will reduce lint on cottons . . . brighten colors.

The Houghton Man has a folder of samples finished with various types of Resonet. Ask him to show it to you, or write E. F. Houghton & Co., Philadelphia 33 or Charlotte 6, for full details.

HOUGHTON'S RESONET

Since 1868 – The First Name in Packaging

NOW - THE SOUTH'S LARGEST AND FINEST CORRUGATED AND FOLDING BOX PLANT

ATLANTA PAPER COMPANY'S NEW PLANT HAS BEEN BUILT TO PRODUCE PACKAGING MATERIALS UNDER THE MOST FAVORABLE MANUFACTURING CONDITIONS.

BY GIVING OURSELVES A PHYSICAL PLANT DESIGNED FOR MAXIMUM QUALITY & QUANTITY, WE ARE able TO GIVE OUR CUSTOMERS IMPROVED QUALITY, SERVICE, & ECONOMY.

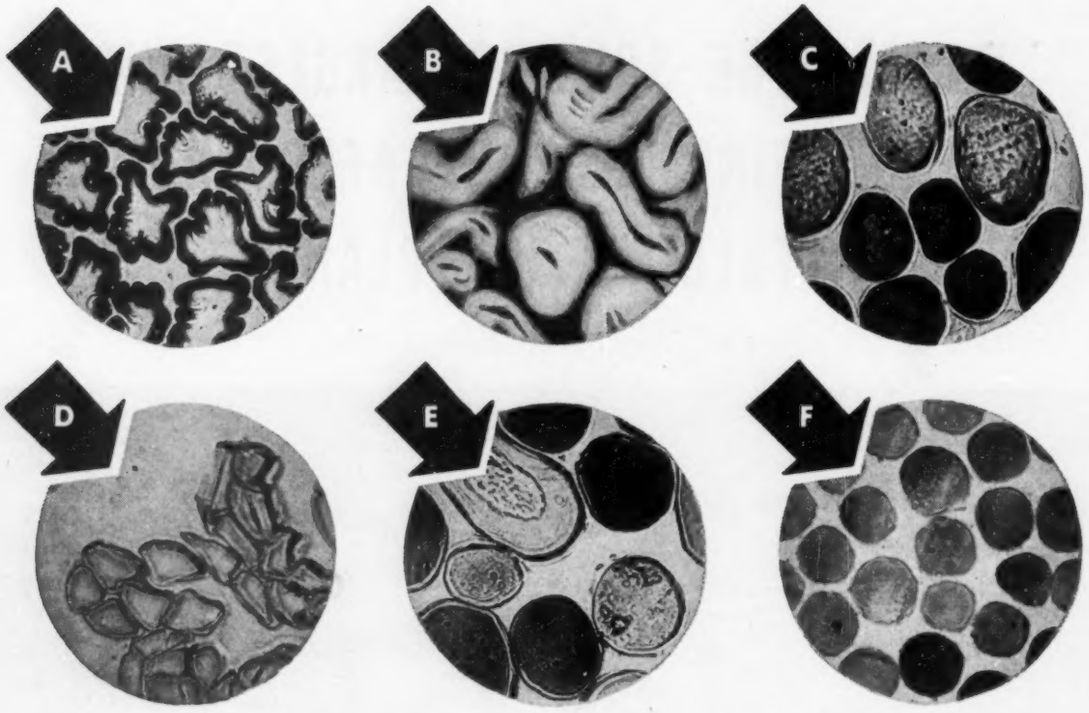
APACO ESTABLISHED 1868

CORRUGATED SHIPPING CASES • BELSINGER CORRUGATED TEXTILE CASES • DISPLAY FOLDING CARTONS • PRINTED PAPERS & CONE WRAPS • GLASSINE SPECIALTY BAGS • KRAFT & WATERPROOF PAPER • GUMMED TAPES • TEXTILE SPECIALTIES

ATLANTA PAPER COMPANY

ATLANTA 2, GEORGIA

How many of these Fibers can you Identify?



Photomicrograph Courtesy Textile Fiber Atlas

You're an expert if you guessed all six. No matter how many of these fibers you named correctly, they're all vital to Stein Hall. Each of these fibers and many more are continually under the scrutiny of our laboratory technicians.

For 83 years, Stein Hall has serviced the textile industry by developing the finest products for warp sizing, printing, and finishing fabrics made from these and other fibers.

Continuous study...endless testing under expert supervision in controlled laboratories means a more efficient operation in your plant.

Trained salesmen will tell you about Stein Hall textile products. Laboratory specialists will back them up. For a textile problem, call on Stein Hall

A Viscose Rayon
B Cotton
C Wool
D Silk
E Mohair
F Nylon

WRITE FOR QUOTATIONS, FREE SAMPLES AND CONSULTATION

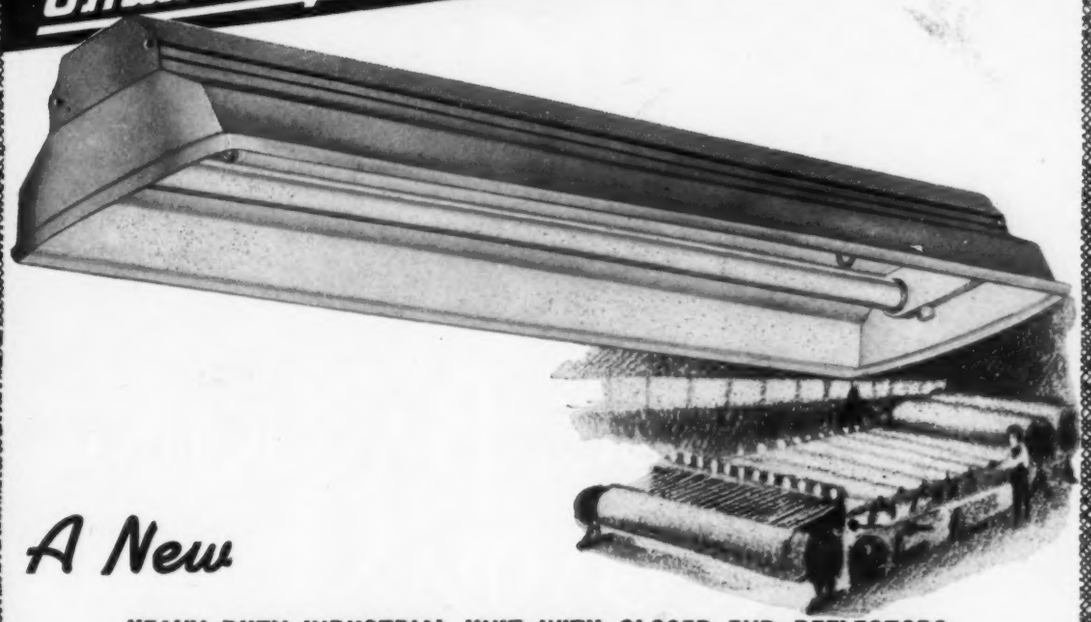
STEIN HALL

285 MADISON AVE., NEW YORK 17, N. Y.

Branch offices in other cities in the U. S. and Canada

THERE'S ECONOMY *in* Smithcraft LIGHTING

Smithcraft TURRETER—SERIES 5



A New

HEAVY DUTY INDUSTRIAL UNIT WITH CLOSED END REFLECTORS SPECIFICALLY MADE TO MEET THE RIGID REQUIREMENTS OF THE TEXTILE INDUSTRY

Turreter—"Series 5" by Smithcraft is a heavy duty industrial fluorescent designed to withstand extreme conditions, provide higher lighting efficiency at lower cost, with minimum service requirements.

This new fixture is available in four or eight foot units, for two or three 40-watt T-12 lamps (per four foot section), and, in eight foot units for two 96" T-12 or T-8 Slimline instant start lamps. Turreter "Series 5" incorporates the new 5" turret socket lampholders—assuring simplified maintenance and trouble-free operation. The use of electrolytic zinc-coated bonderized steel assures resistance to corrosion for longer fixture life. Reflectors are finished in lifetime porcelain enamel and held securely with the exclusive Smithcraft Fasloc fasteners, a development which assures simple maintenance. The channel, identical for both individual and continuous-row installation, is arranged for every type of mounting with convenient knockouts for electrical connections.

Smithcraft Turreter—"Series 5" combines every desirable lighting feature to give more light in the working zone, with a minimum of maintenance and low cost. Specify Smithcraft Turreter "Series 5"—another outstanding fluorescent fixture by Smithcraft—manufacturer of America's finest fluorescent fixtures.

Smithcraft
LIGHTING DIVISION
CHELSEA 50, MASSACHUSETTS

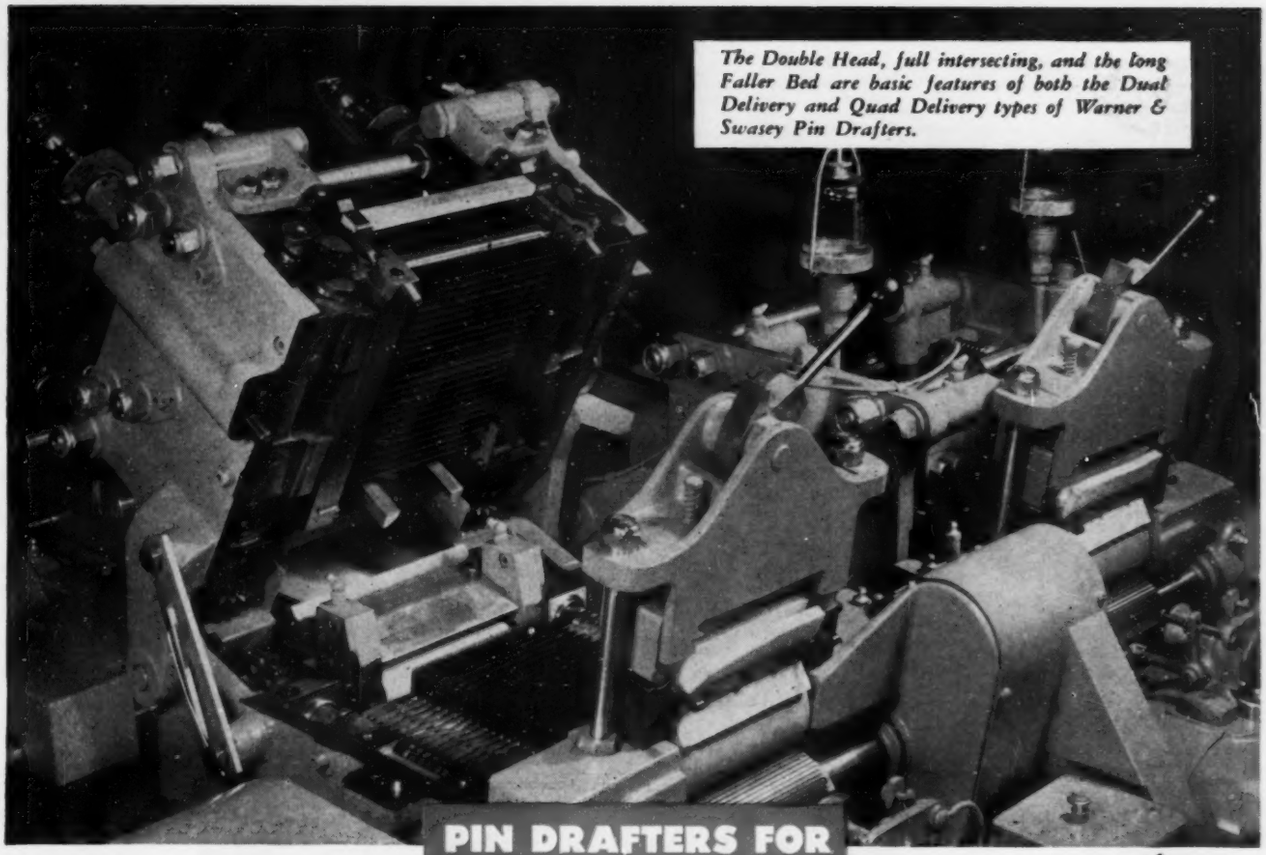
TEXTILE BANKING COMPANY

Inc.

Factoring Service

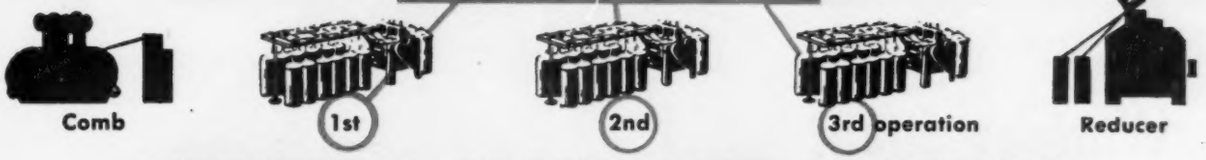
Puts your sales on a cash basis
Strengthens your cash position
Relieves you of credit losses

55 MADISON AVENUE • NEW YORK



The Double Head, full intersecting, and the long Faller Bed are basic features of both the Dual Delivery and Quad Delivery types of Warner & Swasey Pin Drafters.

PIN DRAFTERS FOR



BETWEEN COMB AND REDUCER

you can do it better, faster, for less . . . with a

Warner & Swasey

Pin Drafter

TRADE MARK

Warner & Swasey Pin Drafters Provide a Simpler System

These new drafters eliminate costly steps in preparing sliver for spin. They deliver better, more even sliver in greater volume, and with less fly waste. They permit better blending for finer fabrics at less cost. You'll find it profitable to use these new Pin Drafters in your present production system—you'll find them still more advantageous as you adopt other improved textile machines which promise radically changed methods and better finished products.

Our Field Engineer in your territory is experienced and can give you complete information. Write

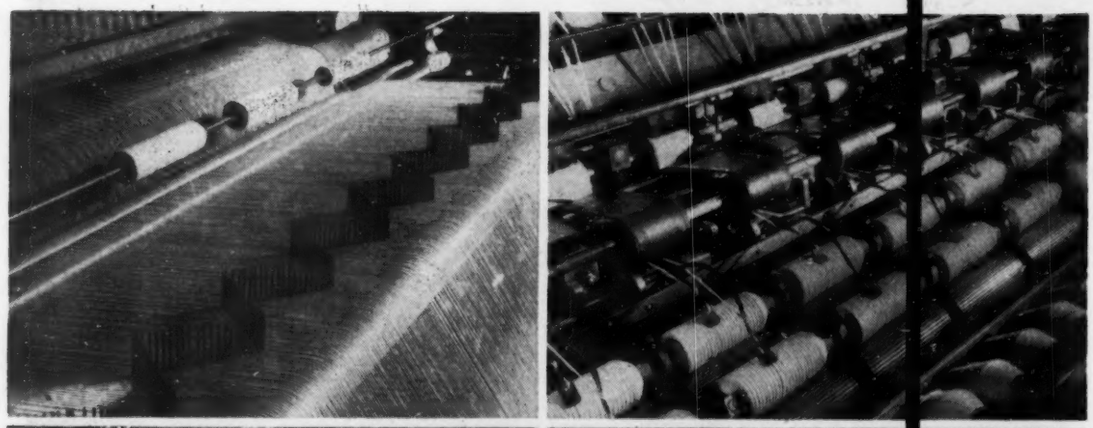
WARNER & SWASEY
Cleveland
TEXTILE MACHINERY DIVISION

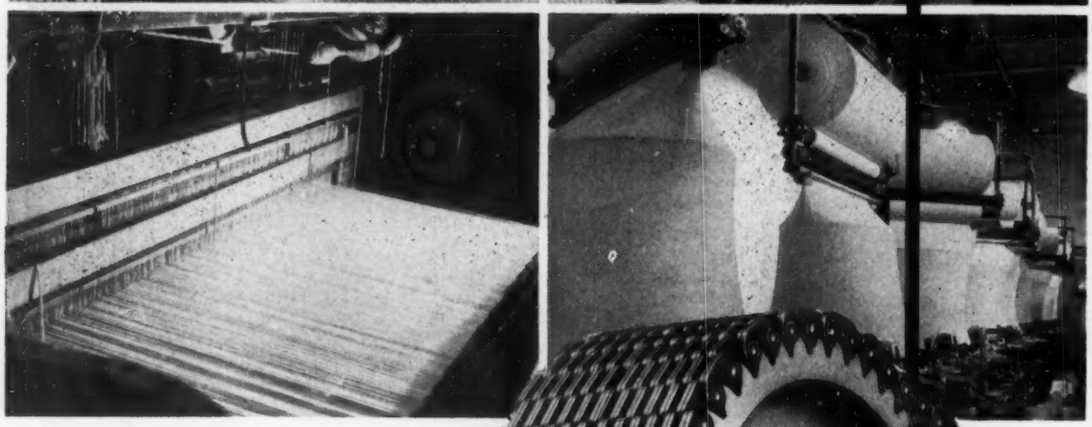
BRANCH OFFICES

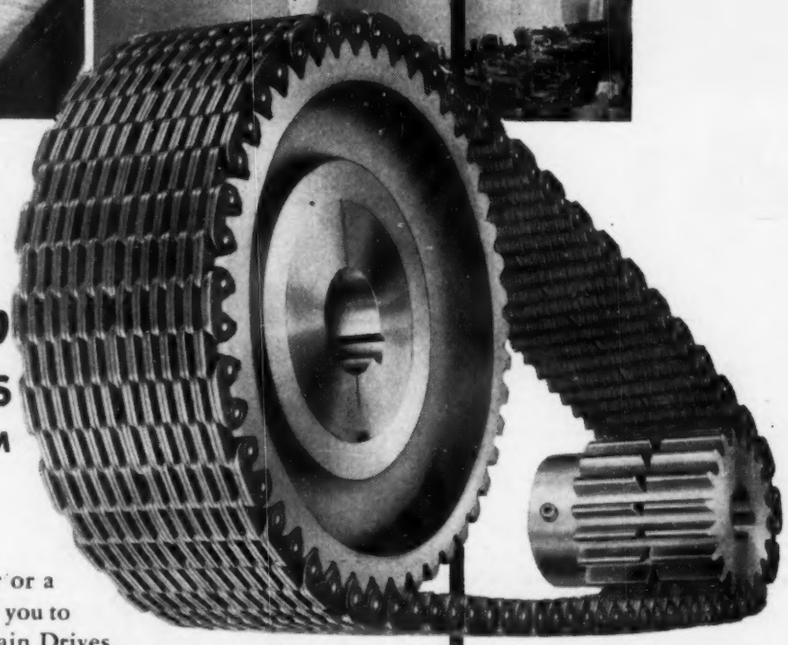
RIVULET MILL
Uxbridge, Mass.

6910 MARKET STREET
Philadelphia, Pa.

CANDLER BLDG.
Atlanta, Ga.







Whitney Silent Chain Drives help

TEXTILE MACHINES

DELIVER MORE UNIFORM QUALITY OF CLOTH

Whether you are a manufacturer or a user of textile machines, it will pay you to *standardize* on Whitney Silent Chain Drives.

Used as original equipment, Whitney Silent Chain helps build product reputation by giving long-lived performance . . . requiring less maintenance . . . assuring positive transmission of power to driven elements.

Used as replacement by the textile manufacturer, it assures product uniformity . . . cuts down seconds and rejects . . . reduces chain costs with its long operating life.

Equipment manufacturer or textile producer . . . you can profit with Whitney Silent Chain Drives and Cut Tooth Sprockets . . . the *all steel drives.* Write for information.

HERE'S WHY CHAIN DRIVE IS BETTER

- Positive grip
- Transmits full horsepower
- Simplifies transmission designs
- Constant uniform speeds
- Absorbs and cushions shock loads
- Low maintenance
- Long operating life
- High load carrying capacity

Whitney Chain & Mfg. Company
DIVISION OF WHITNEY-HANSON INDUSTRIES, INC.
223 Hamilton Street, Hartford 2, Conn.

new!

exceptionally fast to light

ORANGE

Superlitefast DIRECT DYES

REG. U.S. PAT. OFF.

ORANGE LLLWF

Features:

- ★ 150-300 hours light fastness
- ★ extremely level dyeing in all percentages
- ★ leaves acetate white
- ★ exceptional wash fastness at 160°F. with soap and soda, even without resin treatment
- ★ light fastness is not materially affected with curable resins.

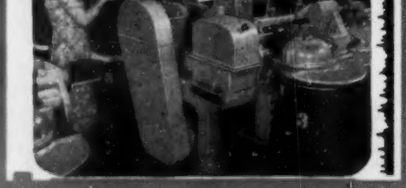
ALTHOUSE
Chemical Company, Inc.
READING · PA.

pace-setter in precision dye-making

GENERAL ELECTRIC "TEXTILES

Dramatically– it presents the latest facts on these vital topics!

Mill Modernization
. . . lighting, air conditioning, better acoustics, better use of color, etc.



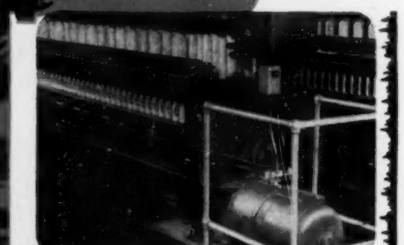
Finer Quality Control
. . . how it is being obtained in leading mills of every type.

Power at the Point of Use
. . . individual electric drives for a wide range of machines.

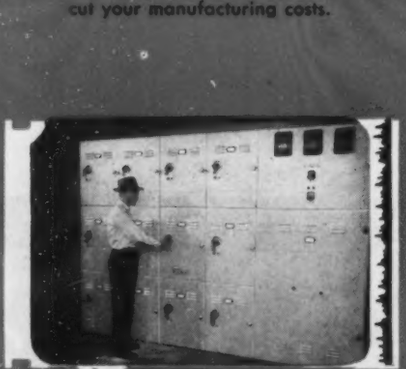
Materials Handling
. . . and the ways in which it can cut your manufacturing costs.

it's authentic!

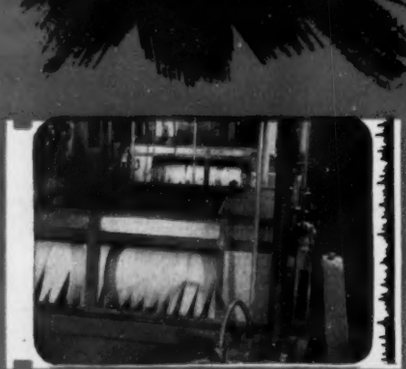
Filmed under actual operating conditions in mills like yours!



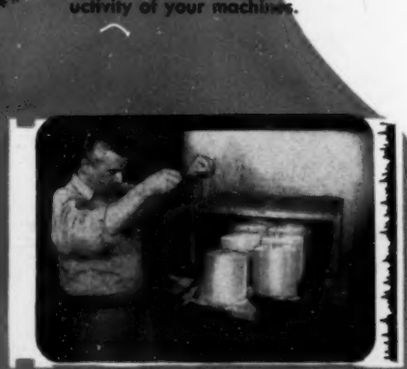
Higher Controlled Speeds
. . . as a way to increase the productivity of your machines.



Modern Power Distribution
. . . and the part it plays in cutting over-all production costs.



Continuous Processing
. . . two machines or twenty in one efficient, cost-cutting range.



New Processing Methods
. . . and their importance in opening new textile markets.

ANNOUNCES "TEXTILES UNLIMITED"

A new, full-color sound movie on Textile Mill Modernization

PACKED WITH QUALITY-IMPROVING, COST-CUTTING IDEAS!

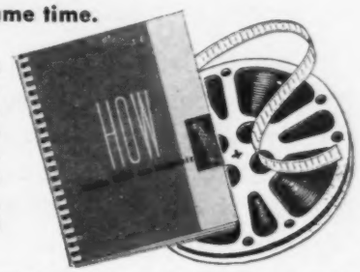
With material and labor costs up and competition tougher, you don't want to miss a single opportunity to cut your manufacturing costs and improve the quality of your product. That's why we know you'll want to see "Textiles Unlimited," General Electric's new full-color sound movie on how textile mills are modernizing.

Practically every phase of modernization is covered in this dramatic, yet highly factual presentation. Lighting, air conditioning, power distribution, machine drives, quality control—these are only a few of the pertinent subjects treated. What's more, the ideas shown *in action* are practical—this film was made in mills located in every important textile area.

Don't delay! Arrange now to see this film. Mail the coupon—we'll do the rest. *Apparatus Dept., General Electric Company, Schenectady 5, N. Y.*

Here's how you can arrange to see this movie *and* get a FREE MODERNIZATION MANUAL at the same time.

Mail the coupon below to let us know you would like to see "Textiles Unlimited." We'll also send you a FREE copy of "How Textile Mills Are Modernizing," a 100-page illustrated reference manual for textile mill modernization. (Additional copies at cost—$1.25)



General Electric Co.
Section E654-8, Apparatus Dept.
Schenectady 5, N. Y.

Yes—I'd like to see your new modernization movie "Textiles Unlimited." Also, please send me a FREE copy of "How Textile Mills Are Modernizing" (Bulletin GEA-4998).

Name .....

Position .....

Company .....

Address .....

.....

More Power to America

GENERAL ELECTRIC

BETTER CARDING

...IN A NUTSHELL

Get down to the meat of your carding problems by following these three simple rules —

The Ashworth "Rule of 3"

RULE 1 — Select the correct type of card clothing for the purpose. Be sure; get the advice of experienced Ashworth men.

RULE 2 — Select a card clothing source which can give you the best in quality and a complete range . . . when you want it . . . where you want it. Backed by more than 50 years of manufacturing experience, 4 factories, 6 repair shops and 7 distributing points in all important textile areas, Ashworth is the answer.

RULE 3 — Keep your card clothing, card bearings and chains in good condition; inspect them periodically. Use Ashworth Surveys for this purpose. They're free of charge and will enable you to plan repairs so they will involve minimum loss of production time.

PRODUCTS AND SERVICES:

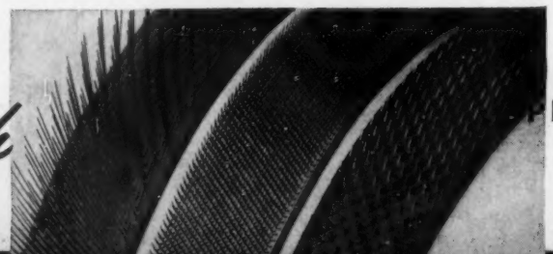
Card Clothing for Cotton, Wool, Worsted, Silk Rayon and Asbestos Cards and for all types of Napping Machinery. Brusher Clothing and Card Clothing for Special Purposes. Lickerin Wire and Garnet Wire. Sole Distributors for Platt's Metallic Wire. Lickerins and Top Flats Reclothed.

Write or call us for further information.

ASHWORTH BROS., INC.
AMERICAN CARD CLOTHING CO.
(Woolen Div.)

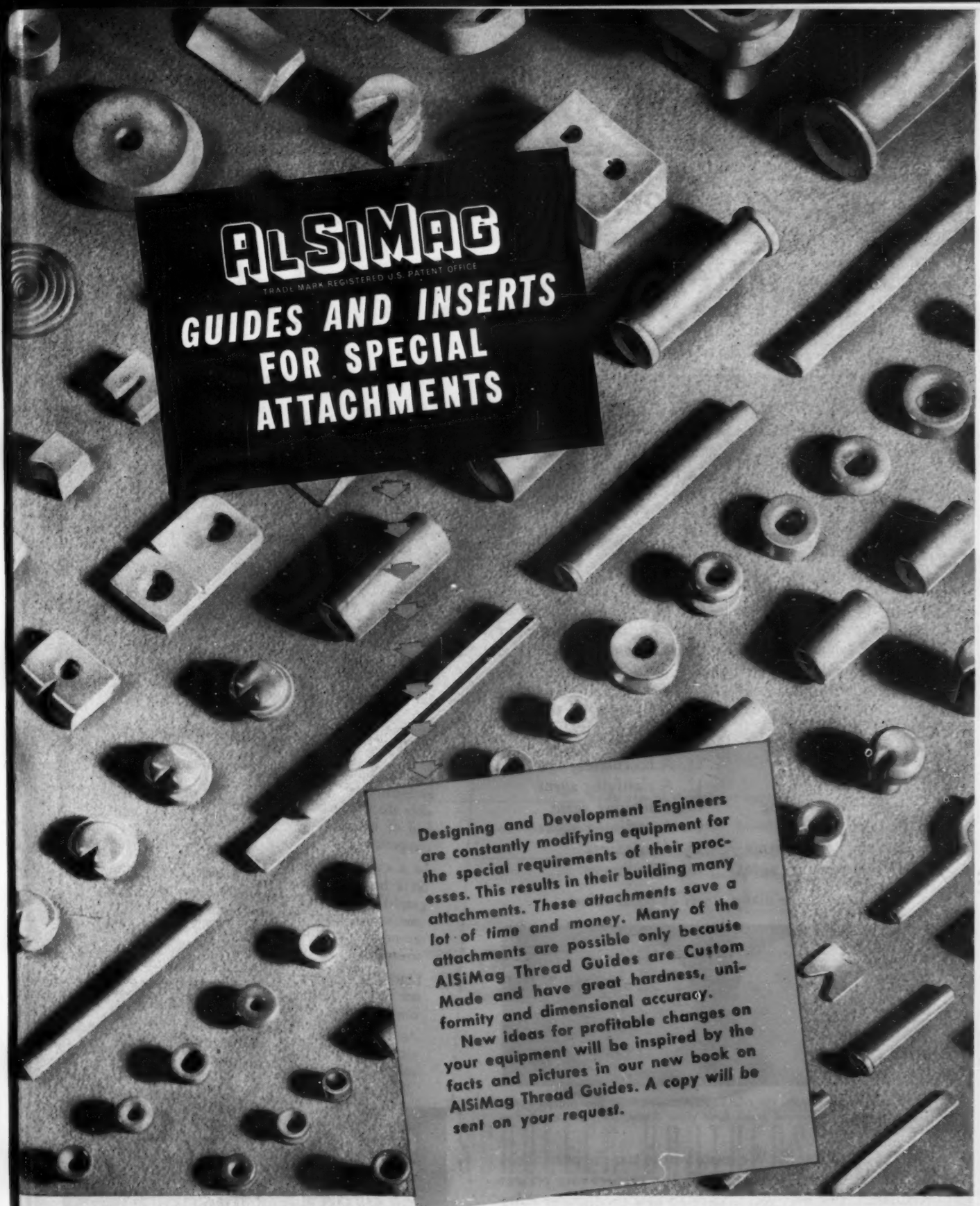
Fall River*†‡ Worcester*‡ Philadelphia*†‡ Atlanta†‡
Greenville†‡* Charlotte†‡ Dallas†‡ (Textile Supply Co.)
*Factory †Repair Shop ‡Distributing Point

Ashworth



PIONEERS IN CARD CLOTHING

4 FACTORIES · · · 6 REPAIR SHOPS · · · 7 DISTRIBUTING POINTS


ALSIMAG
TRADE MARK REGISTERED U.S. PATENT OFFICE
GUIDES AND INSERTS FOR SPECIAL ATTACHMENTS
Designing and Development Engineers are constantly modifying equipment for the special requirements of their processes. This results in their building many attachments. These attachments save a lot of time and money. Many of the attachments are possible only because AlSiMag Thread Guides are Custom Made and have great hardness, uniformity and dimensional accuracy.
New ideas for profitable changes on your equipment will be inspired by the facts and pictures in our new book on AlSiMag Thread Guides. A copy will be sent on your request.

AMERICAN LAVA CORPORATION

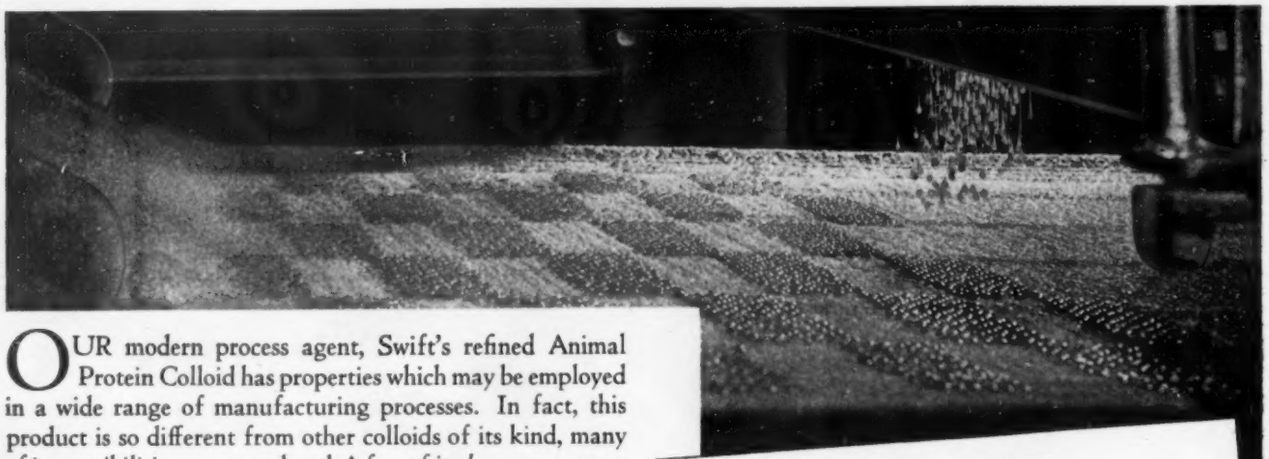
48TH YEAR OF CERAMIC LEADERSHIP

CHATTANOOGA 5, TENNESSEE

OFFICES: METROPOLITAN AREA: 671 Broad St., Newark, N. J., Mitchell 2-8159 • CHICAGO, 9 South Clinton St., Central 6-1721
PHILADELPHIA, 1649 North Broad St., Stevenson 4-2823 • LOS ANGELES, 232 South Hill St., Mutual 9076
NEW ENGLAND, 38-B Brattle St., Cambridge, Mass., Kirkland 7-4498 • ST. LOUIS, 1123 Washington Ave., Garfield 4959

You tell us! *What uses can be made of a process agent as clean as...*

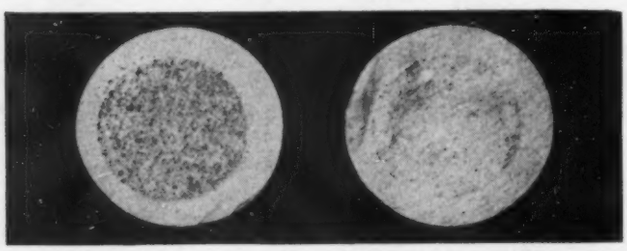
Swift's Animal Protein Colloid*?



OUR modern process agent, Swift's refined Animal Protein Colloid has properties which may be employed in a wide range of manufacturing processes. In fact, this product is so different from other colloids of its kind, many of its possibilities are unexplored. A few of its *known* uses are:

1. An emulsifier
2. A flotation agent
3. A gel structure
4. A settling agent
5. A protective coating
6. A sizing agent
7. A carrier of pigments
8. An impregnating agent
9. A base for pigments
10. An oilproofing agent
11. A flocculating agent
12. A clarifying agent
13. A filtering agent
14. A stiffening agent
15. A mordant
16. An adhesive

...but there may be many *others* of equal value!



Here a filter test indicates the relative cleanliness of this new process agent. Left: Ordinary commercial grade bone glue. Right: Swift's Animal Protein Colloid.

Try it for yourself. We invite you to test the possibilities of Swift's Animal Protein Colloid. It may meet your present requirements or help you to develop new products or more efficient processes.

For further information about Swift's Animal Protein Colloid write: →

What is this modern process agent?

Swift's Animal Protein Colloid is made by an exclusive Swift process. This process makes possible the production of high quality protein colloid of unusual uniformity in particle size and composition.

In a spotless modern plant, protein liquor falls on a bed of dry finished product (see photograph) which adheres evenly to the droplets. By continuous schedule, under precise control every second, these droplets are dried, milled and screened.

During this almost automatic operation, the product has no contact with materials which could contaminate it with foreign substances.

As a result, Swift's Animal Protein Colloid is a clean, finely ground powder (light amber in color) which goes into solution rapidly.

Swift & Company

Adhesive Products Department

4125 Packers Avenue

Chicago 9, Illinois

Come on in...

the water's fine!

Inevitably, every wool product of the not-far-distant future will be processed for shrink-resistance. Tomorrow's competitive markets will demand that wool products of almost every description assure true washability to command consumer acceptance and satisfaction.

MORE and more alert manufacturers are turning to Schollerizing for *practical, trouble-free* wool shrinkage control—

_____ **because** of *simplicity* of application!

_____ **because** of the broad, flexibility of application!*

_____ **because** of consistent *uniformity* of results!

*Extremely flexible in application, wool may be Schollerized in raw stock, top, skeins, packages or fabric, before or after dyeing.

*Shrinkage controlled to within 2%

SCHOLLERIZING adds no foreign materials to the original wool—takes nothing from the original wool. The character, appearance and weight of the original fibre remain unchanged. SCHOLLERIZING eliminates the primary cause of wool shrinkage—matting and felting—without any effect upon the inherent resiliency, elasticity, texture, feel or "hand" of the fabric while strength of the yarn is generally the same or greater than the original.

THE ANSWER TO YOUR WOOL SHRINKAGE CONTROL PROBLEM IS

Schollerized
WASHABLE WOOL
SAFE TO TUB • SAFE TO RUB

U. S. & Foreign Process Patents Pending

Visit booth No. 39 at the AATCC Convention, Atlantic City, October 13th-15th

Write Today For Full Details On The Amazing Scholler Wool Shrinkage-Control Process applied to YOUR product!

SCHOLLER BROTHERS, INC.

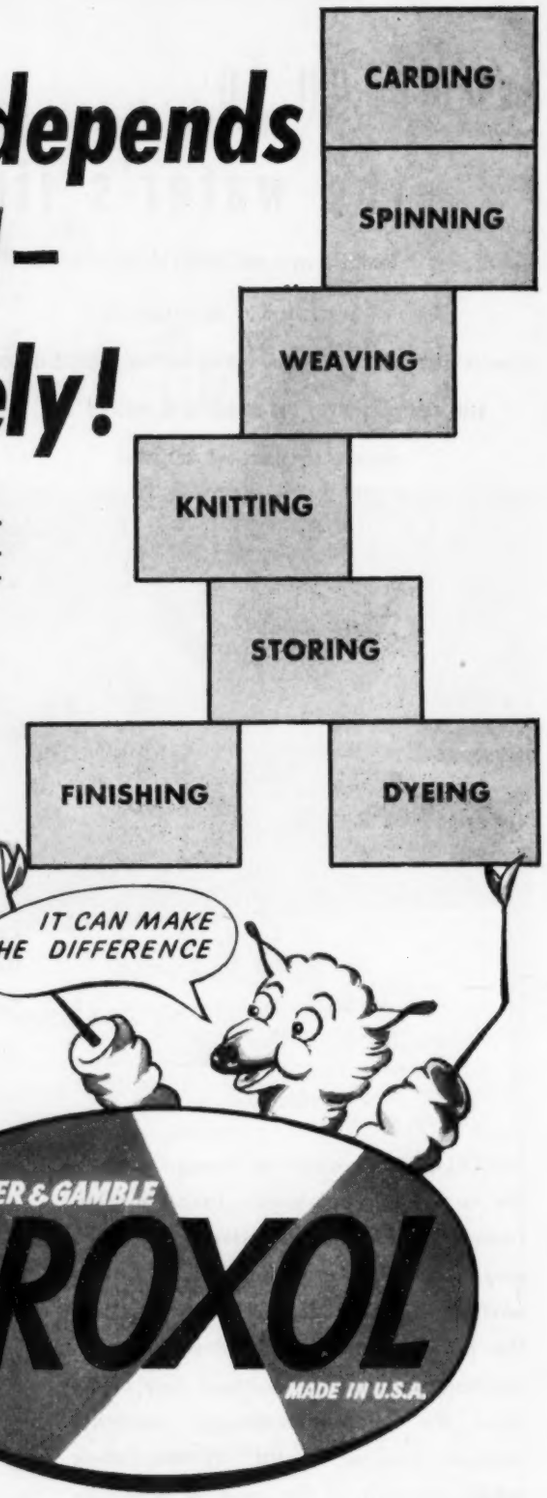
Manufacturers of Scouring, Dyeing and Finishing Materials

COLLINS at WESTMORELAND, PHILADELPHIA 34, PA.

IN CANADA: SCHOLLER BROTHERS, LTD., ST. CATHARINES, ONTARIO

SERVING THE TEXTILE INDUSTRY FOR MORE THAN FORTY YEARS

When so much depends on your Wool Oil— Choose Wisely!



Application of a wool oil on wool fibers is the simplest thing in the world. But have you ever considered how such a simple operation can affect every succeeding processing step?

It can make the difference between top notch results and endless troubles in carding, spinning, weaving, knitting, storing, finishing and dyeing operations.

No wonder textile men agree that the efficient performance of a wool oil is one of the biggest factors in smooth, profitable woolen processing. And no wonder that textile men in increasing numbers are depending upon Proxol to guard against difficulties resulting from the use of less efficient products.

Where PROXOL efficiency shows up:

Self-emulsifying—
forms stable emulsions

Increased Carding Efficiency—
less waste, less static,
no corrosion

Increased Spinning Efficiency—
minimum fiber breakage . . .
fewer ends down

Stronger, more uniform yarns

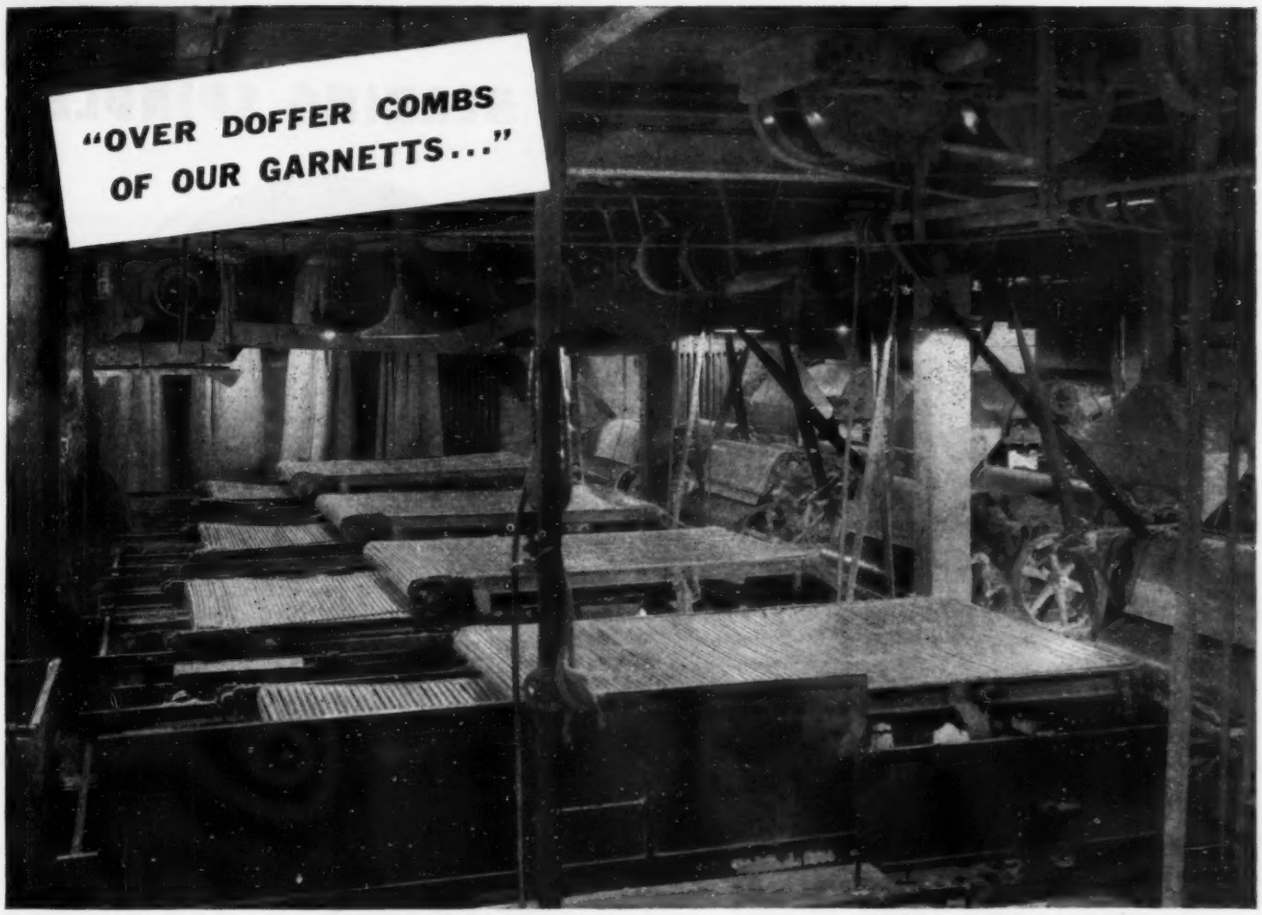
Easy Scouring—regardless of storage period

No change in Storage—no heating up in storage, no odor or discoloration.

Proxol will raise your sights on wool oil efficiency. It will pay you to investigate its many advantages.

Procter & Gamble CINCINNATI, OHIO

Makers of OLATE, *the efficient, all-purpose textile soap.*



Row of four garnetts at Burton-Dixie plant equipped with Chapman Static Neutralizers.

"Chapman Neutralizers completely kill static at trouble point!"

says JOHN G. SEVCIK, *President*
BURTON-DIXIE CORPORATION, CHICAGO

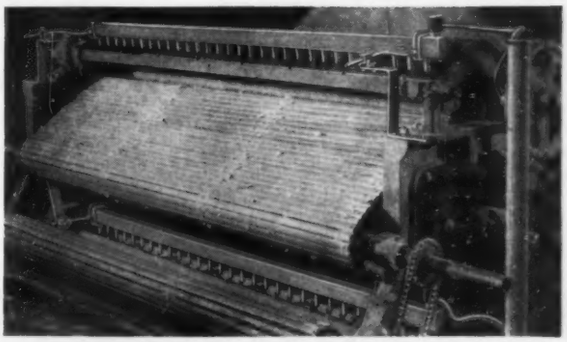
Proof enough of the thoroughly effective operation of Chapman Static Neutralizers, are recent repeat orders received from the Burton-Dixie Corporation. But John G. Sevcik, President, goes further.

He writes:

"Your Neutralizers installed over doffer combs of our garnetts completely kill static charges acquired by fibres during garnetting, and do so right where static gave us trouble.

"With the help of this equipment," he continues, *"machines can be started in cold or dry weather without resorting to steam or water. They greatly reduce waste and interruptions due to frequent web breakages, noticeably reduce fly, are very efficient in turning out continuous good production."*

Why not find out how Chapman Static Neutralizers can reduce waste, eliminate delays, assure smooth, continuous operation in *your* plant. Write for Bulletin No. 70 and prices.



Double Doffer Garnett at Illinois Felt Company plant equipped with Chapman Static Neutralizers.

★

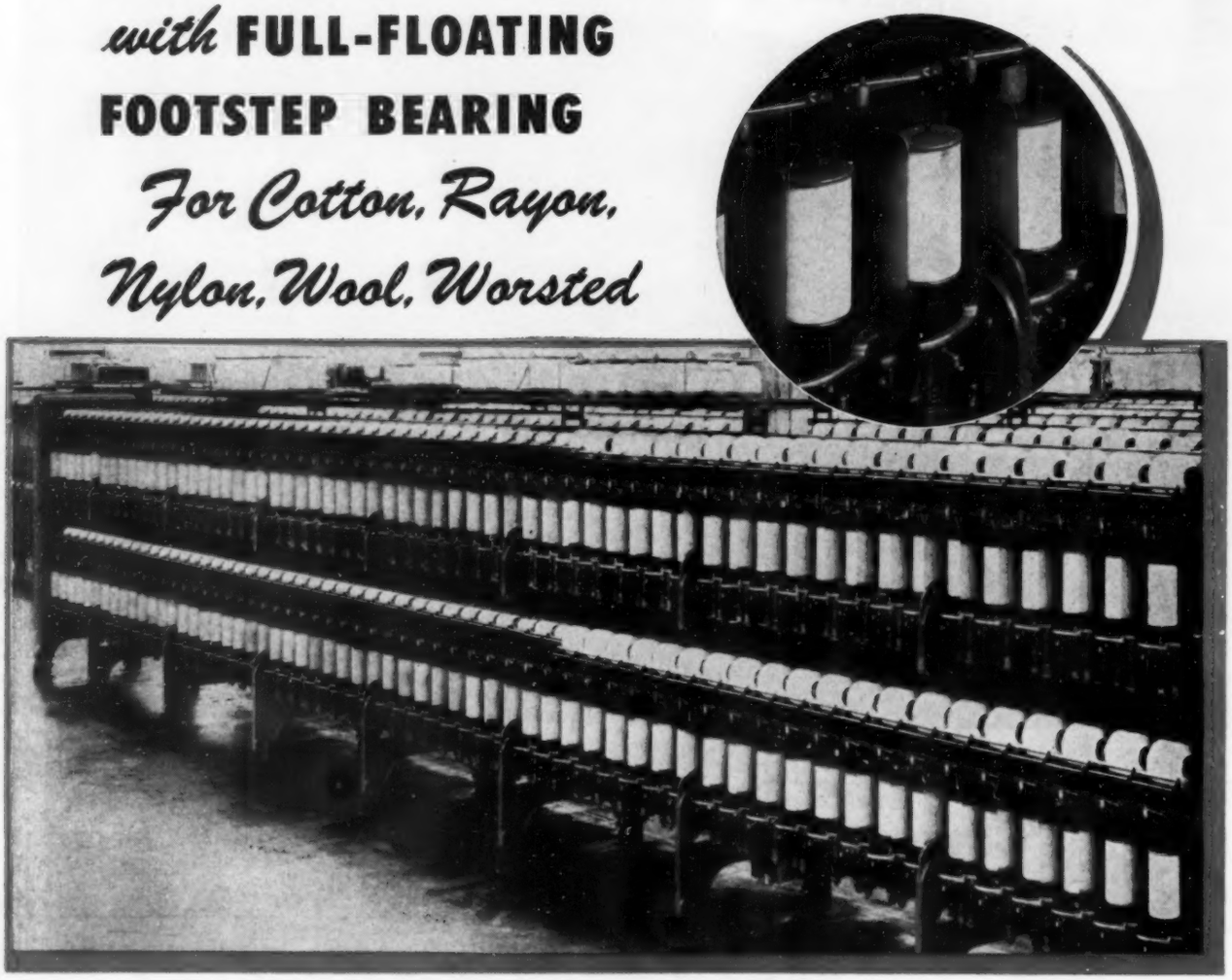
CHAPMAN ELECTRIC NEUTRALIZER CO.
Established 1904
38 - 68 FORE STREET, PORTLAND 6, MAINE

Representatives: D. H. SPEIDEL, 343 So. Dearborn Street, Chicago 4, Ill.
IAN M. HALDINE & CO., London, Canada

Marquette ROLLER BEARING SPINDLES

with FULL-FLOATING FOOTSTEP BEARING

For Cotton, Rayon, Nylon, Wool, Worsted



34,000 Marquette Roller Bearing Spindles in this nylon throwing mill replaced 41,500 plain bearing spindles—with no increase in power consumption. Package size was increased from 4 oz. to 12 oz., and speed was increased from 12,000 to 14,000 r.p.m. Result: More *yarn* at *lower cost.*

Modernize *your* old frames with Marquette Roller Bearing Spindles, or specify them on new frames. They operate efficiently at high speeds with large packages, and require less power. For a test installation, contact our home office or one of our representatives.

PROTECTED BY U. S. AND FOREIGN PATENTS, AND PATENTS PENDING

The Marquette
METAL PRODUCTS COMPANY
CLEVELAND 10, OHIO
SUBSIDIARY OF CURTISS-WRIGHT CORPORATION

Representatives:
BYRD MILLER, WOODSIDE BLDG., GREENVILLE, S. C.
C. H. WHITE, 1229 PAMLICO DRIVE, GREENSBORO, N. C.
WILLIAM P. RUSSELL, BOX 778, ATLANTA, GEORGIA
JOHN J. HALLISSY, 58 LIVINGSTON AVE., LOWELL, MASS.
IAN M. HALDANE & COMPANY, P. O. BOX 54, LONDON, ONT.

Also Manufacturers of: HYDRAULIC GOVERNORS • FUEL OIL PUMPS • FUEL OIL INJECTORS
WINDSHIELD WIPERS FOR AIRCRAFT, TRUCKS AND BUSSES • PRECISION PARTS AND ASSEMBLIES

Vol. 113
No. 10

Textile Industries

October
1949

ITT Redirects Its Program

FIVE YEARS after the signing of its charter and coincident with the graduation of its first class of students, The Institute of Textile Technology in Charlottesville, Va., has paused, taken a good look at its accomplishments, and decided to make some changes.

As originally conceived, the Institute had three stated objectives: It planned to train men on the graduate level, to carry on scientific research, and to provide a library and information center. The money to make possible this work was to come from the member mills, and the member mills were to get the direct results in trained manpower and in scientific accomplishment.

As would any new organization starting into a broad field of research about which it knew little and about which little had been done, the Institute had high ideals and great expectations. It collected for its staff and its faculty many learned and distinguished men of physics and chemistry and gave them the opportunity to start at the very fundamentals of the industry's problems. No one could criticize either the ability or the sincerity of these men. They went about their jobs and did them well so far as the fundamental explorations into textile research were concerned.

There were also on the staff a few young and intelligent engineers and physicists. In numbers these engineers and physicists were in the minority.

At the end of the five years, the mill men who support the Institute discovered some interesting facts. They found that from their own practical point of view they had received most of their benefits from the work of the small group of engineers and physicists rather than from the larger group of fundamental researchers in chemistry.

The mill men could see and touch four important machines designed and developed by the staff: (1) the uniformity meter for determining the evenness of sliver, roving, and yarn; (2) a moisture absorbency tester; (3) a yarn abrasion tester, and (4) a cloth inspection machine.

Emphasis at ITT is to be placed primarily on practical research and on practical applications. Quick and helpful answers to mill problems are first on the Institute's agenda. Fundamental research will not be forgot, but will take a back seat.

These facts were significant for the member mills. Emphasis must be redirected. Engineering development must take precedence over fundamental research.

This fundamental research is necessary, yes, but quick and practical results are first for the mills who pay the bills.

So now we find a redirection of emphasis at the Institute of Textile Technology. That emphasis is to be placed primarily on practical research and on practical applications, with fundamental research not to be forgot, but taking a back seat. Quick and practical answers to mill problems are first on the Institute's agenda. In this way it is hoped that every year the member mills can show economic gains as a direct result of their membership.

It is to be noted that fundamental research is not to be forgot. The Institute still feels that it has an obligation to the entire textile industry to investigate such fields as the fundamentals of fibers, and qualified researchers will be so employed in this and similar work and student thesis research will be in these fields. From these men no quick results are expected. They are to be left free to work on projects which may not materialize for several years. Perhaps over the longer period of years their work may provide the mills with the greatest benefits. They are to be the long shots, and some of them are going to come through, but the Institute is now determined to put most of its money on the favorites where the pay-off may not be so startling but is surer and faster.

The Institute also adopted a better method of presenting its findings to the member mills. Previously it tried to make sure that only those mills which helped pay for the research benefited from the information carried in its reports. This, it was felt, was only fair, but the emphasis on secrecy was so great that frequently only the president of the mill read the report, and the operating men who would get the most value from it never saw it.

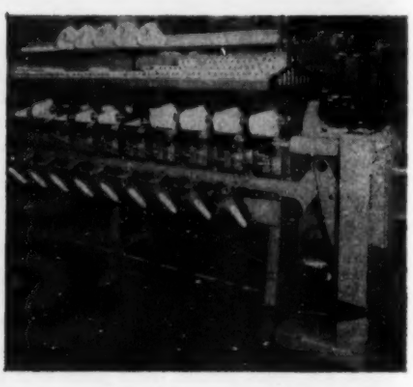
Now, though research data on specific problems shall be given only to the mill which sponsors it, Institute research data will be made much more generally available so that it can be freely passed down to the men in the mill who really could use it.

The educational program of the Institute is to be broadened. Heretofore the major portion of the students selected for the graduate work have been taken from schools of chemistry. In the future the students are to be selected from broader fields —textile engineering, mechanical and electrical engineering, chemistry, and physics. Any graduate in any scientific field may apply for admission, and the faculty intends to choose them from all fields of science and engineering so that the textile industry may profit from their various backgrounds.

These changes should mean a stronger Institute, one better able to answer the immediate problems of the industry while still searching for those fundamentals which will some day mean new textiles made in new and better ways.

These changes mean better dissemination of information to the mills and to the industry. And these changes mean a broader and more versatile graduate of the only industry supported institute in the nation which offers graduate degrees in textiles.

Among the Companies you think of first for cotton yarns and fabrics



More cotton mills are replacing old winding equipment with Roto-Coners* than any other make.

are these who think of UNIVERSAL first for *winding*

UNIVERSAL WINDING CO.
PROVIDENCE

LEESONA

ATWOOD

ston · Philadelphia · Utica · Charlotte · Atlanta · Chicago · Los Angeles · Montreal · Hamilton, Canada
anchester, England · Paris, France · Basle, Switzerland · Agents in every principal textile center throughout the world.

*The only winding machines with the Rotary Traverse

Winding and Twisting Machinery for Natural and Synthetic Fi

NEWS in BRIEF

Synthetics Feel Government Research Biased. Manufacturers and processors of synthetic fibers feel that government research on agricultural products is prejudicially applied. Government research funds from general taxation support research on cotton but not on synthetics. Rayon producers feel that their own intensified but costly research has paid off, and because of it they are being penalized.

Clemson Improves Principle of Spinning-Twisting. A newly proposed technique under development at Clemson College textile school for ring spinning and twisting is expected to enable higher winding tension which places from 15 to 50 per cent more yarn on the usual bobbins, and at the same time improves the yarn strength, uniformity, and appearance. The technique introduces resistance or friction to the flow of the yarn where it is wound on the bobbin. Several devices for carrying out the proposed method are being tested and studied at Clemson.

Where Finishing is Done. For 1948, South Carolina led all states in yardage in the finishing of cotton fabrics. Massachusetts was second, with North Carolina third. New Jersey led on finished rayon fabrics.

To Study American Methods. Representatives of Great Britain's cotton textile industry are scheduled to arrive in the U. S. in October to begin a study of American methods that may be helpful in increasing British productivity—sponsored by ECA.

Cost of Mechanically Picked Cotton. Only a third of the total cost of mechanically picking cotton is chargeable to actual operating costs and maintenance of the machine. The remaining two-thirds is divided between cotton price reduction due to lowered grade and loss of cotton left in the field, as compared to hand picking, according to C. E. Frudden, engineer of Milwaukee, Wis. Better equipped gins are able to reduce the grade losses.

Vote for Unified Association. The board of directors of the Cotton-Textile Institute, Inc., and the board of governors of the American Cotton Manufacturers Association have voted affirmatively to dissolve both organizations and form a new association to be known as The American Cotton Manufacturers Institute, Inc. The action is contingent upon acceptance by members of the two associations. As a result of this action, the annual meeting of the Cotton-Textile Institute, which was scheduled for Nov. 3, 1949, has been cancelled.

Hosiery Mill Steam Costs Reduced. By reclaiming the heat in the steam exhausted by the hosiery preboarding machines, one North Carolina full-fashioned hosiery plant has reduced its steam cost by 32 per cent. Enough heat is extracted from this exhaust steam to heat all of the water used in the dyehouse plus all water used for boiler feedwater make-up.

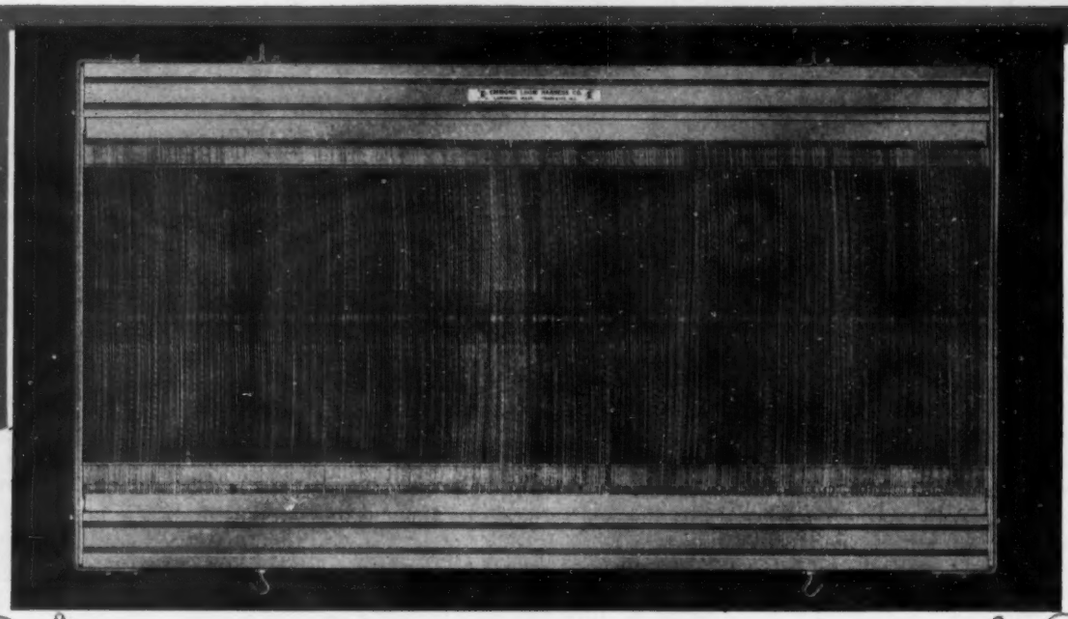
Station Named for Mill Executive. The designation as Harris, S. C., of the station previously known as Cothran, S. C., has been made by the Southern Railway Company. Site of the new Harris Plant of Greenwood Mills, the station is named for J. B. Harris, vice-president of Greenwood Mills.

Scholarships Slighted. One textile company which offers free tuition for two years at any textile college to mill operatives and their families, reports only one application filed since the scholarship was established two years ago.

Labor Sidetracks Union Policies. A new trend in collective bargaining has been reported by several mills in the New England area. Labor has shown an increasing willingness to arbitrate disputes on a local level to the exclusion of their union's regional office. Some informal contracts have been arranged between mill and employ-

SUGGESTION SYSTEM PAYS OFF

The suggestion program at Firestone Textiles, Inc., Gastonia, N. C., provides a method through which employees can convey to management their ideas related to improvements in the various phases of textile operations. Awards recently have ranged from $7.50 to $100. Here, Harold Mercer, vice-president, has just presented award payments to employees.



EMMONS ALUMINUM DRAWING-IN FRAME

A True Continuous Slide Type

The Newest and The Best Answer For Filament Rayon Weaving!

Note these EMMONS design features!

EMMONS Drawing-In Heddles

Heddles slide freely the full length of the frame. Heddle rods are permanently spaced at proper intervals . . . there are no rod supports. The possibility of faulty adjustment is overcome. Heddle rods have beaded edge, which, because of scientifically shaped bearing surface, aids free sliding of the heddles.

Frame ends are detachable, allowing for the addition or subtraction of heddles. Frames come in double iron or combination construction and are of single bar style in ⅜" thickness only.

Make use of these EMMONS operational features!

1. Warp may be either machine or hand drawn.
2. Frames extremely easy to clean.
3. Heddle and yarn breakage greatly reduced.
4. Frames impervious to humidity. Keep their shape.
5. No special repair heddles required.
6. No rod holders or lock hooks to get out of adjustment.

ALUMINUM FRAMES ARE BETTER FRAMES!

Here's why!

Aluminum Frames won't corrode, regardless of weave room humidity! Aluminum Frames are many times stronger than wood and last longer!

Aluminum Frames also available for standard heddles. Get in touch with your nearest E Man.

E MEN ARE LOCATED AT:

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Branch Plant
GEORGE FIELD, Manager
P. O. Box 2036
'Phone — 3-7503

NEW YORK
W. S. TAYLOR
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'Phone — Lexington 2-6060

ATLANTA
ARTHUR HARRIS
P. O. Box 1982
'Phone — Main 2643

GREENVILLE
P. W. COLEMAN
P. O. Box 1393
'Phone — 2-3327

CHICAGO
ALBERT R. BREEN
80 E. Jackson Boulevard
'Phone — Harrison 7140

DALLAS
R. D. HUGHES SALES CO.
2201 Cedar Springs
'Phone — R-4157 — C-6283

EMMONS

WEAVE ROOM EQUIPMENT

MAIN OFFICE AND PLANT: EMMONS LOOM HARNESS CO., LAWRENCE, MASS.

ees which apparently run counter to parent union policy; however, work continues with nothing more than "categorical" expressions of displeasure coming from the union.

Supervisory Training Book. Metropolitan Life Insurance Company, One Madison Ave., New York, has published a book on supervisory training which is a case history study of how many companies perform this function. Textile methods and practices may be compared with those described.

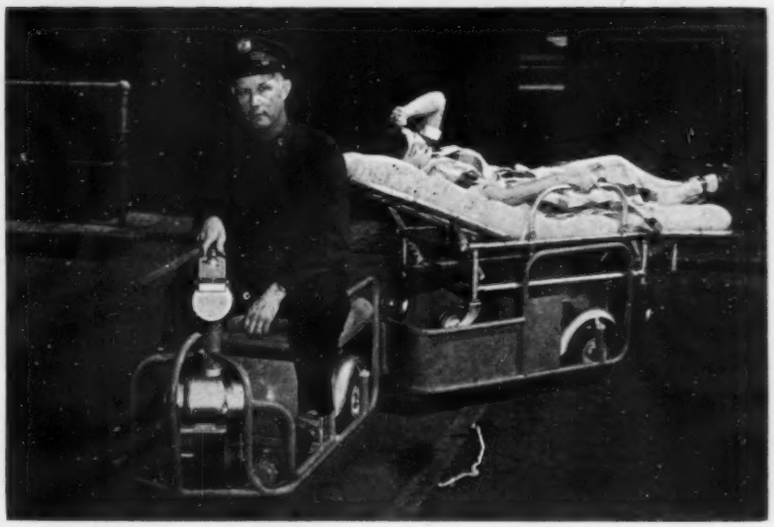
Bondsett Carpet. A cigarette burn or stain on the rug need not be a minor tragedy if James Lees and Sons Company's Bondsett rug is used, according to the company. The damaged areas can easily be removed and matching patches seamed in quickly. Bondsett is woven with a special resinous backing which takes tape-seaming so that it is almost impossible to detect the seams.

Record Egyptian Crop. Egyptian cotton production may reach a record high of 1,975,000 bales for the 1949-50 season, according to the National Cotton Council. Relaxation of planting restrictions and greater availability of fertilizer are credited with bringing about the increased production.

Foreman Decision. The NLRB recently ruled that foremen who refuse to perform maintenance work during a strike can be fired. The company was said to be entitled to have in supervisory positions persons on whom it could depend for emergency duty to forestall destruction of key plant facilities.

Nylon Tire Cord. The development of a successful method for building tires of nylon cord without the use of restricting cross threads to space the cords has been announced by Goodrich.

Motor Exchange Plan. The new Westinghouse motor exchange plan is designed to minimize the inconvenience if motor failures occur—to get another motor on the job promptly with the least possible loss of productive time. Stocks of replacement motors are maintained at the company's warehouses. If a motor fails it may be exchanged immediately for a motor of identical rating.



MOBILE FIRST AID UNIT

The Widgit mobile first aid unit is 24 inches wide and 95 inches long—can turn in 60-inch circle. Note pneumatic tires. Beall Manufacturing Company of Cleveland gets credit for the innovation. Speeds up to 15 mph are attainable.

Plant Maintenance Show. The Plant Maintenance Show will be held in the auditorium, Cleveland, Ohio, January 16-19. A conference to be held in conjunction with the show will be the first ever devoted exclusively to maintenance problems. Information may be obtained from Clapp and Poliak, Inc., 341 Madison Ave., New York 17, N. Y.

Magazine for Mill Editors. "Textile Editor" is a new magazine for editors of house organs and employee publications. Address, Box 499, Gainesville, Ga.

Operatives Would Return on Non-Union Basis. It is reported that 500 former employees of Saratoga Victory Mills who lost their jobs when the mill closed, expressed a desire to return to work on a non-union basis.

Call for Product by Brand Name. Of 1,000 high school and college girls who might walk into a store, 163 would have in mind a specific manufacturer's brand of article to be purchased—would accept no other. In an additional 330 instances, the sale could be made only if one of several specific makers' brands were available. The brand-minded group was close to 50 per cent. Survey was made by the Student Marketing Institute of New York.

Bag Campaign Successful. At the end of the Cotton Bag Market Committee's first anniversary, impressive gains had been made in the cotton bag selling drive. Consumption of all cotton bag fabrics showed a general increase of 10 per cent.

Future of Cotton Concerns Rayon Industry. A substantial decline in the price of cotton relative to the price of rayon might precipitate a crisis in the rayon industry, said Frank A. McCord of the National Cotton Council at the recent Beltwide Cotton Mechanization Conference. The rayon industry is said to be concerned. Mr. McCord pointed out that with such problems facing the rayon industry, it is unlikely that smart rayon pro-

✓ *Prevents Snarling of Yarn*

✓ INCREASES PRODUCTION UP TO *50%*

✓

REDUCES DYEING COSTS *10 to 30%*

SMITH-DRUM SKEIN DYEING MACHINE

This is the machine that "moves the liquor instead of the yarn." As a result of this principle, first introduced by Smith, Drum & Company, there is no tangling of the skeins or breaking of the filaments. This means greatly improved back-winding with consequent saving in time and cost.

Because there are fewer knots in each skein, the fabrics made of Smith-Drum dyed yarn are of better quality. Savings in dyestuffs, steam, water and floor space result in a reduction in over-all dyeing costs that run as high as 10-30%. Even in large capacity machines, there is no tendency toward variation of shade due to variation of temperature because entire body of liquor moves from one end of machine to the other. Because it handles larger batches than any other machine occupying the same floor space . . . and because faster dyeing permits more batches per day . . . this machine increases production as much as 50% over other types of skein dyeing equipment. Catalog will be sent upon request.

SMITH, DRUM & COMPANY

Allegheny Avenue at 5th Street, Philadelphia 33, Pa.

ducers will continue to increase capacity rapidly.

Textile Study Made in Cannon. As an experiment in public relations, key instructors from high schools in Kannapolis toured Cannon Mills to learn how textiles are related to subjects they teach and directly affect the students' homes.

To Stop Pipe Freezing. Use of electrically heated rubber of the wire resistor type is foreseen to stop freezing in pipes and to maintain temperature in hydraulic systems. Constructed of resistance wires insulated with fabric plies sandwiched between layers of rubber sheeting, the product is available in nearly any size, shape, or weight and for temperatures up to 300 F.

Cold Body Plastic Solder. For repairing leaking pipes and tanks and for patching worn and leaking plumbing, a new cold body plastic solder serves the purpose and requires no heat.

World Sheep Population. A slight increase in the sheep population of the world for 1949 over recent years is indicated in that total sheep at the beginning of the year are placed at 720,000,000 head. This is five million more than in 1948; however, this figure shows a decline from the average of prewar years.

Part 425 of Renegotiation Regulations Issued. Formal agreements, clearances, and statements to be used in military contract renegotiation proceedings are given in new Part 425 of the Military Renegotiation Regulations, which has been released. The new part of the regulations may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C.

Plastics and Textiles, Again. From news releases: Slip covers of clear plastic film protect upholstered furniture . . . new laundry hose of extruded plastic will not mar the beauty of laundry equipment . . . waterproof plastic laundry bag protects seat of car, keeps laundry clean, and can be cleaned with a damp cloth . . . three-in-one purse has reversible plastic cover that snaps on and off to harmonize with practically every costume . . . all-purpose raincape of plastic film for evening wear or for sports . . . plastic quilting gives wide variety of decorative applications in the fields of upholstery and wall covering. . . .

Educate to Eat Up Food Surpluses. A serious farm depression may be with us again unless a major part of the long-range farm program is designed to encourage American consumers to eat up potential food surpluses, says the National Planning Association. Opinion in the trade has been that the public might also be educated to wear out more shirts, sheets, and other textiles.

Converters Still Healthy. Loss of grey goods sources caused by vertical integration of many rayon manufacturers is not causing much alarm among converters. The feeling is that converters have a vital function in the cutting up trades. Making up of small orders, versatile operations, originality of texture designing, finishing to specifications, and easy adjustment to seasonal fluctuation are some of the characteristics which will tend to keep converters solvent. Recognizing this, several large rayon piece goods manufacturers are diverting all their grey goods to the converter market.

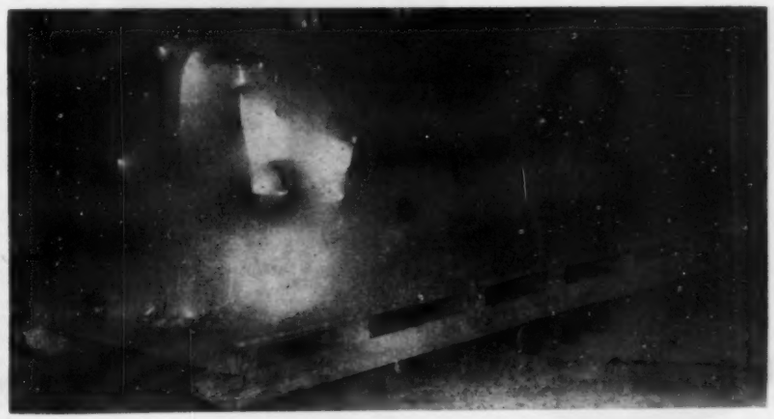
Groups Invited to Participate in Rayon Standards. Thirty-five trade associations representing companies in the wearing apparel and accessories field have been invited by the National Retail Dry Goods Association to take part, with the technical groups already participating, in the development of standards for rayon fabrics suitable for use in men's and women's clothing; work is being done under the procedure of the American Standards Association.

College Mill to Liquidate. The Athens (Ala.) College hosiery mill, which has provided students with a means of earning part of their board and tuition, will be liquidated because of losses sustained during the past two years.

Convenient Procedure for QMC Suppliers. A small-purchase pro-

KNITTING MACHINE WRAPPED IN A "COCOON"

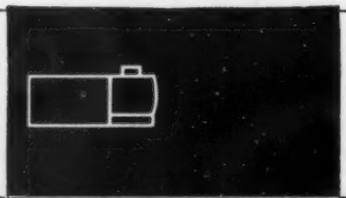
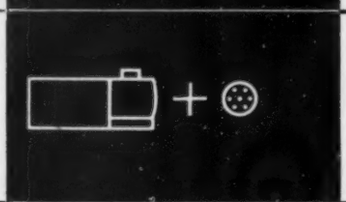
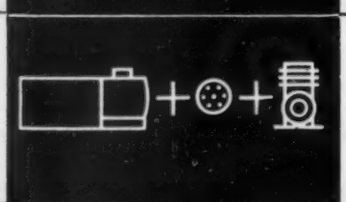
Reiner Twin Knitters are now being "cocooned" for shipment over long distances. According to Robert Reiner, Inc., this way of preparing machinery for long distance or overseas shipment is the best guaranty against damages by inclement temperatures, sea water, dirt and dust, etc.



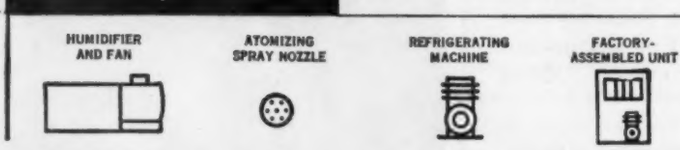
PROBLEM:

How to find the most profitable air conditioning

SOLUTION: **ONE OF CARRIER'S 5 SYSTEMS**

CENTRAL STATION SYSTEM CONSTANT HUMIDITY VARIABLE TEMPERATURE		Gives maximum evaporative cooling. Mill temperatures are dependent on outside weather and therefore hour-to-hour variations are unavoidable. Generally better than the Combination System for humidities of 75% to 65% or lower, depending on various other conditions.
COMBINATION SYSTEM CONSTANT HUMIDITY VARIABLE TEMPERATURE		Gives good evaporative cooling. Mill temperatures are dependent on outside weather and therefore hour-to-hour variations are unavoidable. More favorable in cost than the Central Station System for humidities of 65% to 75% or higher, depending on various other conditions.
CENTRAL STATION SYSTEM WITH REFRIGERATION CONSTANT TEMPERATURE CONSTANT HUMIDITY		Gives absolute control of temperature regardless of outside weather and eliminates trouble-making hour-to-hour, day-to-day variations. It combines the cost advantages of the Central Station System plus Refrigeration. Provides the maximum benefits for labor, the best conditions for fibers, and a minimum of machine readjustment.
COMBINATION SYSTEM WITH REFRIGERATION CONSTANT TEMPERATURE CONSTANT HUMIDITY		Gives absolute control of temperature regardless of outside weather and eliminates trouble-making hour-to-hour, day-to-day variations. It combines the cost advantages of the Combination System plus Refrigeration. Provides the maximum benefits for labor, the best conditions for fibers, and a minimum of machine readjustment.
SELF-CONTAINED SYSTEM CONSTANT TEMPERATURE CONSTANT HUMIDITY		Will do all that the other systems will do. It is ideal for small rooms, laboratories, pilot plants, cafeterias, offices, and other small areas because it is factory manufactured and assembled. A wide range of capacities is available and the units are unusually compact, easy to install, and low in cost.

KEY:



With five systems, Carrier has no axe to grind other than to recommend the one best suited to your needs. Carrier's forty years of experience in the textile field assure you of a know-how that provides the most practical set-up for men, material and machines. A Carrier installation makes dollars and sense. For complete information, call your nearest Carrier representative or write us. Carrier Corporation, Syracuse, New York.

Carrier

AIR CONDITIONING • REFRIGERATION • INDUSTRIAL HEATING

cedure has been developed for use by the QMC. The procedure simplifies and facilitates purchases of $1000 or less. One form provides the order, packing slip, payment voucher, and other necessary papers.

England's Largest Heavy Cotton Loom. The largest heavy cotton loom ever made in England was recently demonstrated. From the drawing board to completion it took 2½ years. The loom is 20 feet square, nine feet high, and weighs 20 tons. It is fed by 16,000 pounds of yarn at a time and will produce fabric ten times heavier than ordinary cotton looms in widths up to 12 feet. The shuttle travels at a speed of 35 to 40 miles per hour.

Knit Machines Criticized. Common complaint among knitters is that the industry's machine manufacturers still persist in turning out ornate, hard to clean knitting frames. Knitters prefer smooth surfaced frames showing no adornments such as fancy grille work and cast scrolls. Trade marks or manufacturers' initials cast in bas-relief are also objected to. Another sought for feature is color engineering. Lower cleaning and maintenance costs are reasons cited by some leading knit wear producers.

Fabric Allergy Treated. Newcomer in the field of textile treatment is Dust-Seal, claimed to control allergenic house dusts. In the form of an invisible liquid film, the chemical is applied principally to the seldom laundered fabrics of the home: carpets, draperies, upholstered furniture, bedspreads, and slipcovers. The Dust-Seal emulsion coats the fibers and prevents the formation or suspension of dust.

The new treatment has prospects of opening a vast market among the nation's estimated three million allergy sufferers hithertofore denied the luxury of textile products. Application may be by mill, retail establishment or home.

Union Drive. The American Federation of Hosiery Workers has launched an intensive organizing drive which will require doubling their staff and spending up to a million dollars. The campaign is designed to unionize the hosiery industry 100 per cent.

THIS COULD BE SERIOUS

But it is not. Lucky that the automobile seat is equipped with new style seat covers which can be removed, washed, and quickly replaced. The lightweight nylon fabric was developed at Burlington Mills: covers are manufactured by Fry Products Company of Detroit.

Plastic Rainwear. Raincoats for men are now being made of Vinylite plastic that has been given a fabric-like sheen which has the appearance of gabardine. The coats are made in the trench coat style and have six large air openings for full ventilation.

Wider Use for Mohair Sought. Wider markets and new uses for mohair will be sought through a project under the Research and Marketing Act of 1946, the U. S. Department of Agriculture has announced. Large stocks, low prices, and the declining use of mohair in recent years are the principal reasons for the project.

Where Dresses are Made. New York state produces three of every four quality dresses worn by American women, according to this state's Department of Commerce.

African Cotton Production to Remain Low. Despite British efforts to save dollars by supplying Lancashire mills with raw cotton from African colonies and dependencies, the total quantities to date have been small, and the potential for the near future does not appear large.

World War II Quartermaster Expenditures. During the last war the Quartermaster Corps spent 20 billion dollars on food, clothing and equipment, and supplies.

Radiant Heating and Wool Floor Coverings. Experiments conducted by the technical committee of the Carpet Institute have shown that radiant heating is not injurious to wool rugs.

Guides for Business Men. The National Military Establishment, Office of Public Information, Washington, D. C., has published guides to assist business men who are seeking military procurement contracts. The guiding publications assist in locating the proper channels of information.

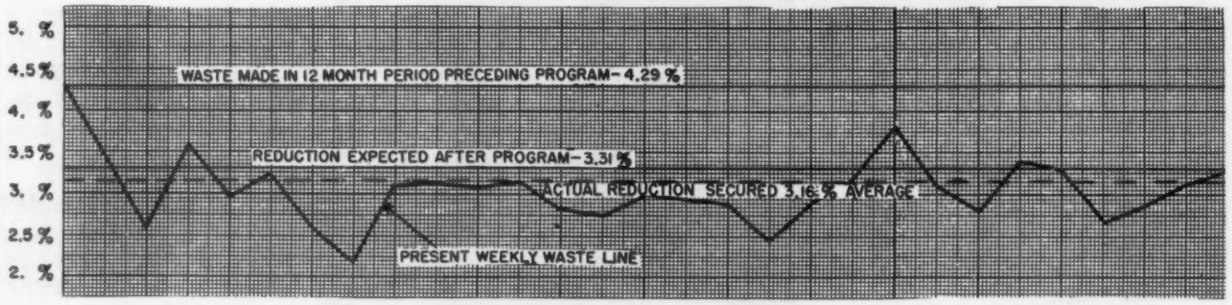
Cotton in Women's Shoes. Current consumption of cotton in shoes stands at approximately 120,000 bales annually, with the potential market being in excess of 350,000 bales a year. Survey figures show that more women are choosing shoes of cotton.

Translucent Vent Plug for Batteries. A new translucent plastic vent plug permits telling at a glance when industrial batteries need water.

Guaranteed Shrink Requirements. Sponsors and processors of leading wet chlorination shrink-resistant processes have offered to guarantee to sweater manufacturers that wool treated by their methods will meet the requirements for shrink-resistant wool as defined in the U. S. Army specifications for the high neck sweater.

Less Waste Means Lower Costs

Actual case history graph. Based on waste reduction figures in prominent rayon mill.



Approximate savings, based on raw material value for 12 month period after program, $75,000.00.

We Guarantee These Results:

- Less Waste
- Closer Control of Waste
- Better Handling of Waste
- Lower Unit Cost

1,330,588 spindles use our waste reduction and control service.*

*Names of mills sent on request.

*Location of mills using Southeastern's waste control program.

SOUTHEASTERN ENGINEERING CO.
West Point, Georgia

( ) Please send me without obligation copy of booklet "Waste Reduction and Control".

( ) We would like for your representative to explain your service to us.

MILL_____

ADDRESS_____

CITY_____ STATE_____

SIGNED_____ POSITION_____

SOUTHEASTERN ENGINEERING CO.

West Point, Georgia

"Specializing in Waste Reduction and Waste Control"

AN

EXECUTIVE VIEWS

THE NEWS IN TEXTILES

Prepared by a man who is closely identified with the textile industry.

"It is up to us individually and collectively for the sake of our industry, for the sake of our employees, and for the sake of our country to speak up vigorously, forcefully, and with detailed facts."

MOST OF US who work for the textile industry in an executive capacity have done a fair job of training ourselves from the technical standpoint, and through the years we have remained alert to possibilities of modernizing our plants and improving our methods of production. In another respect, however, we have probably not been as alert as we should have been. For one thing, we have never taken a sufficient interest in politics, and we have never as a group kept ourselves sufficiently posted with regard to current questions which may not *directly* affect the textile industry.

An example is the current controversy which has been going on about the tariff question. No doubt most of us have been in favor of a protective tariff for textiles, but the industry's viewpoint has never been unified enough nor has it been vocal enough. Most of us feel that a tariff is probably necessary if we are to keep out "coolie-made" goods, but we don't know enough about the question to really give an intelligent answer if we should be questioned on specific points.

We have all been guilty of this in one degree or another, and it is quite understandable that we should be, because men who are busy trying to supervise the work of others and at the same time are trying to get together the necessary money to meet weekly payrolls cannot get too involved in academic studies. Nevertheless, we have found in the past fifteen or twenty years that unless we get involved in politics and unless we as an industry form a more unified opinion and express ourselves more vocally, then others in this nation are going to control the government for the benefit of the minority.

Keep Eye on ECA

No doubt the average man on the street feels that the Economic Cooperation Administration—popularly known as ECA—is doing a good job and that we are getting our money's worth. In other circles, that would be a highly debatable point. Nevertheless, within recent weeks and months many people in the industry have come to believe that unless ECA activities are watched they can constitute a threat to American mills.

ECA, of course, is only one phase of the complicated situation which exists with regard to imports and exports, the building up of competitive industry in foreign nations, and our relations with other countries.

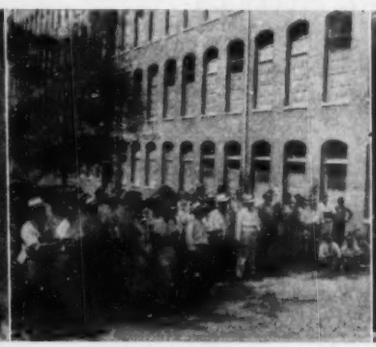
For some time, there have been rumors that certain agencies of the Federal government were toying with a plan through which the United States would purchase textiles and other items from Marshall Plan nations, paying dollars for these goods and bringing them to the United States for stock-piling, for resale in the domestic market, or for export to other countries. As this is written, the "underground" information is that such a proposal is merely in the drawing board stage. That it would even be considered, however, is an indication of how far the people in Washington will go along this particular road.

It has been said that the U. S.

UNDER NEW MANAGEMENT

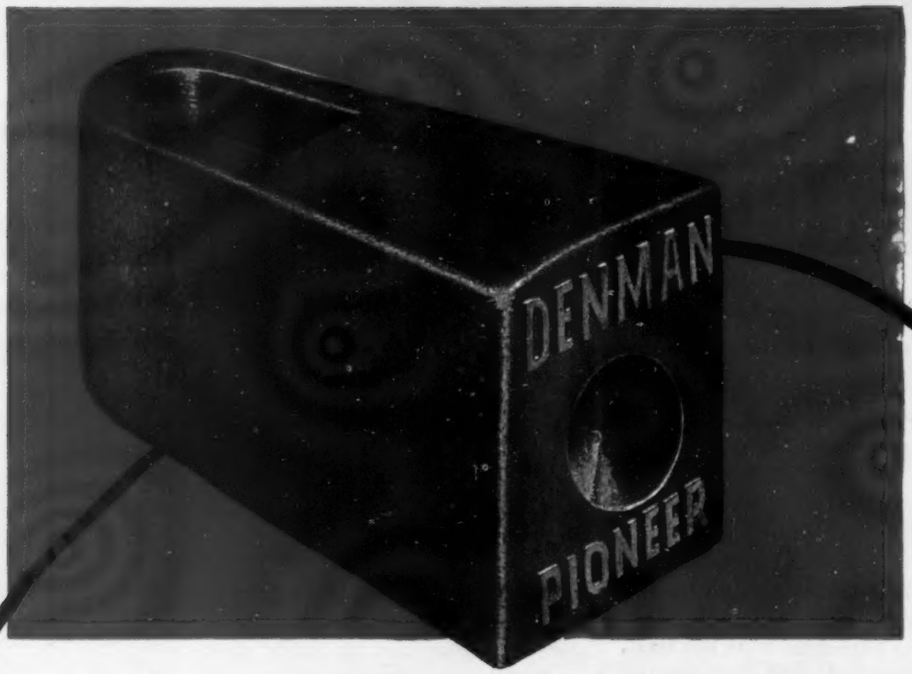
Auctioneer chants as a cotton mill goes on the block.

Bidders, former employees, stockholders, and the curious form the crowd.



Mill employee buys house he lived in before mill was liquidated.

House deal closed. Employee gets lesson in cost from waiting insurance agent.



WHAT MAKES THIS THE *LARGEST SELLING* PICKER ?

1st

More mills use Denman Pioneer than any other make picker because

Denman and Terrell developed the rubberized fabric picker. We know this field and we are the first to furnish the very latest and best improvements in pickers and other loom parts.

2nd

Mills get longer picker and shuttle life through the specialized service of Terrell field men who fit Denman Pioneer Pickers to your individual loom requirements.

Mill men know from experience that Denman loom parts provide Lowest Cost Per Loom Per Year.

MADE BY
Denman Tire & Rubber Co.

watch DENMAN for the best first

Exclusive Sales Representative

The TERRELL COMPANY, Inc.

CHARLOTTE, N. C.

Department of State is as much, if not more, interested in helping England as it is in helping our own nation. It has been further intimated that the State Department's desire to aid England is back of this plan through which American dollars would be used to buy foreign products which would later be sold or stock-piled in competition with the products of American workers.

Be It Resolved

Meeting in special session recently, the board of government of the American Cotton Manufacturers Association passed a resolution pointing out the danger inherent in any such plan. The resolution called upon the Senators and Congressmen from the cotton-producing states and from the states in which cotton textiles are manufactured, requesting them "to take immediate steps to protect the interest of the cotton farmer, the cotton textile employee, and the cotton textile manufacturers." The resolution did not state it but the inference was that certain Federal agencies were about to propose the plan described and that Congress should step in and use the check reign on the administrative departments involved.

As everyone in the textile industry knows, there has been no shortage of textiles in this country for many, many months. The fact that the supply has been ample is illustrated by the curtailment of the past year, as well as Worth Street quotations for yarn and grey goods. With an ample supply of goods in this country, it is not easy to understand why any Federal agency would advocate the spending of American dollars for the goods of foreign nations.

The country learned during the bitter years of the last war that unless an industry had a firm foundation and great potential productive capacity it could not hope to cope with both Army needs and civilian needs. So great was the load upon the textile industry during the war that mills did everything but resort to the old-fashioned spinning wheel to increase their production. No one thought then that there was an over-supply of textiles. As has been pointed out before in TEXTILE INDUSTRIES, the time may again come when America needs the full productive capacity of every available spindle and loom, and any governmental policy which would have the effect of "killing off" a part of the industry would be extremely short-sighted.

Unified Approach

Thus we can see in this particular instance how important it is for our industry to have a unified approach to questions of this nature. We need neither condemn nor condone *all* ECA policies, but if ECA, the State Department, or any other arm of the Federal government is attempting to initiate a program such as that described here, then it is up to us individually and collectively for the sake of our industry, for the sake of our employees, and for the sake of our country to speak up vigorously, forcefully, and with detailed facts. In this "Great Era of Handouts," the people who receive the handouts are controlling government. They go to the ballot boxes; they speak up and express their opinions.

If we are to be good citizens, then we can do no less.

Oct. 12-22—"Textile Recorder" Machinery, Accessories, Yarns and Fabric Exhibition, Belle Vue, Manchester, England.

Oct. 13-14—Annual meeting, North Carolina Cotton Manufacturers Association, Carolina Hotel, Pinehurst, N. C.

October 13-16 — National convention American Association of Textile Chemists and Colorists, Chalfonte-Haddon Hall, Atlantic City, N. J.

Oct. 24-28—37th National Safety Congress and Exposition, Stevens Hotel, Chicago, Ill.

Oct. 27-28—Annual meeting, Carded Yarn Association, Sheraton-Bon Air Hotel, Augusta, Ga.

Nov. 5—Piedmont Section, AATCC, Charlotte Hotel, Charlotte, N. C.

1950

Jan. 16-19 — First Plant Maintenance Show, Auditorium, Cleveland, Ohio.

Jan. 23-25—Annual meeting, National Cotton Council, Hotel Peabody, Memphis, Tenn.

Mar. 30-April 1—Annual meeting American Cotton Manufacturers Association, Palm Beach Biltmore Hotel, Palm Beach, Fla.

April 24-28—Knitting and Allied Crafts Exposition, 71st Regiment Armory, New York, N. Y.

April 25-26—Annual convention, National Knitted Outerwear Association, Hotel Waldorf-Astoria, New York, N. Y.

May 1—Annual meeting, National Association of Hosiery Manufacturers, Claridge Hotel, Atlantic City, N. J.

May 1-2—Hosiery Industry Conference, Claridge Hotel, Atlantic City, N. J.

May 8-12—American Textile Machinery Exhibition, sponsored by National Association of Textile Machinery Manufacturers, Atlantic City Auditorium, Atlantic City, N. J.

Oct. 2-7—16th Southern Textile Exposition, Textile Hall, Greenville, S. C.

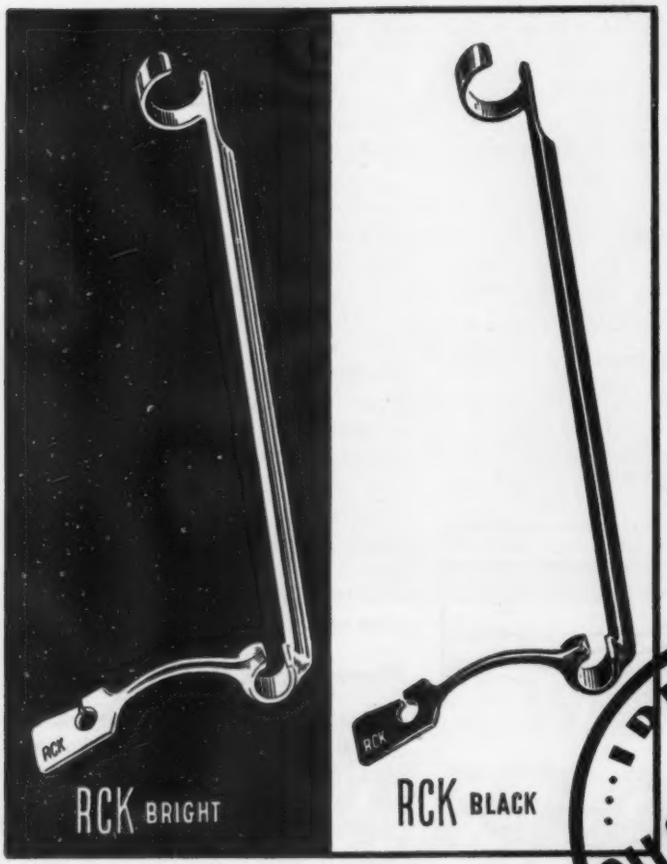
More About Bale Ties

Incidentally, another resolution passed by the American Cotton Manufacturers Association's board had to do with the ever-recurring question of bale tie damage. In a strongly worded statement the board went on record as urging its members to keep careful records of costs incurred because of damage from bale tie stains and urged further that mills charge such damage back to the seller of the raw cotton. Reference was made to Southern Mill Rule No. 41 which provides that damaged cotton cannot be delivered on a contract.

The board's resolution pointed out that if the cost of such damage is passed back through the various channels of the cotton trade, every segment of the industry would become increasingly conscious of this problem and that this would prevent the use of coated ties. The resolution noted the fact that an inexpensive method had been devised for cleaning the asphalt coating off the ties but that members of the association were continuing to receive cotton bearing stains from the asphalt.

It is understood that the association has sent copies of the resolution to all the trade associations in the country representing cotton ginners, cotton compressors, and cotton shippers.

The bale tie problem, like the poor, is always with us.



You can order them with confidence . . . use them with confidence. Every Ideal presser is guaranteed to give complete satisfaction. And for permanent, instant identification, each presser is stamped with the initials, "RCK."

Ideal pressers are made of the highest grade steel, molded and machined to standard specifications. Scientific weight distribution assures perfect balance under operating conditions. And you have your choice of the famous RCK glossy black and RCK bright finishes . . . both highly polished and extremely durable.

Sizes for flyers from 6x3 to 12x6

Delivery from stock—usually same day order received.

IDEAL MACHINE SHOPS, INC.

Phones 4161 and 4391

BESSEMER CITY, NORTH CAROLINA

25TH YEAR OF CONTINUOUS SERVICE TO TEXTILE MILLS

SHORTS and REMNANTS

Dyehouse Troubles

The boss dyer was catching it from the superintendent on matching shades of green. It wasn't the first time, but always the superintendent wanted a certain shade of green.

In exasperation the boss dyer said, "Mr. Super, what's the color on those pine needles?"

Answer: "Green."

"And what's the color on that grass?"

Answer: "Green."

"Well, what's the shade on that bush?"

Answer: "Green."

Boss Dyer: "They're all green, yet each one is different. If the Lord himself can't make them all alike, how do you expect me to!"

◆

Cover to Cover

"I wish to congratulate you on your August issue. I read it from cover to cover, and found it extremely instructive. Under News in Brief you mention non-woven fabrics . . . first have seen on subject. . . . "

PETER T. PATTON
Canadian Worsted Mfg. Ltd.
St. Thomas, Ontario

◆

Down Same Road

"Thanks for August 1949 issue . . . enjoyed editorial (The Federal Fiscal Situation); it expresses my sentiments exactly. Apparently we are headed down the same road as England and possibly France. Keep pounding on the same subject.

RALPH B. STEWART
Washington, D. C.

"On page 55 (August) is a boxed sentence about business men helping to elect the right kind of public officials. That is so cogent and pithily written that I would like permission to reproduce the boxed sentence on a card, letter size, to send to every mill man."

NAME WITHHELD

◆

Materials Handling Section

"Please send us four copies of the special section entitled 'Materials Handling in the Textile Mill,' which appeared in the July 1949 issue."

W. T. CLARKE
United Merchants Laboratories, Inc.
New York

• Reprints are not available on this one.

◆

Needle Straightening

"Kindly send us 25 copies of 'How to Straighten Full-Fashioned Needles.' "

F. BAUMGARTNER
Signature Hosiery Co.
North Wales, Pa.

•A popular article on which reprints were made. Our supply exhausted. Articles can be reproduced inexpensively by Bibliofilm Service, U. S. Dept. of Agriculture Library, Washington 25, D. C.

◆

Steel Cabinet Source

"In your July issue you have an article on 'Cabinet and Gauge for Komet Selectors' . . . interested in obtaining a steel cabinet as illustrated . . . if you know the source from which this can be had."

W. CHARLES POETTER
Nolde & Horst Co.
Reading, Pa.

◆

Mange Cure

Then there's the story about the salesman who asked the superintendent of finishing where he got the new dog to replace the old mangy canine that used to hang around.

"Same dog," was the reply. "That dog was so eaten up with the mange that we finally gave him a bath with your fatty alcohol sulfonate, and one treatment cured him."

Though this story is true and the product has been proved on numerous occasions, the manufacturer insists that it really is made for a different purpose and requests that we do not disclose the product identity.

Time gets by in a hurry, and it is not too early to begin making plans for you and your key men to attend the Atlantic City Show. Advance information portrays this as the biggest and most complete textile exposition ever held. Housing facilities are adequate.

Kind Words

" . . . am enclosing a copy of our . . . letter . . . with which we sent to the members of our Association copies of the reprint of the article on public relations that appeared in the June 1949 issue of your magazine.

"Again let me express my gratitude to you and your associates for making this material available to us, but more than that, for having developed it and published it in the first place, because I know that in so doing you have rendered a very important service to the industry as a whole."

T. M. FORBES
Executive Vice-President
Cotton Manufacturers Association of Georgia
Atlanta, Ga.

◆

Across the Desk

". . . would like to obtain a tear sheet of the article 'Loom Lubrication' by A Lubrication Engineer which appeared in July issue. . . ."

". . . two reprints of the article 'Labor and Management Benefit by Industrial Engineering Principles' in May 1947 issue."

". . . 15 copies of 'Modern Lubrication Methods' which appeared in May 1949 issue of TEXTILE INDUSTRIES."

". . . please advise how to obtain copies of your articles that have appeared 'over the years.' "

". . . noticed a mention of Crawford's waste story from October 1948 issue . . . kindly send me a copy."

". . . possible to obtain Emmett Starr's articles on the Model ES knitting machine which appeared in 1938-39-40."

". . . would like to receive two articles listed herewith which appeared in 1942 and 1943. . . . "

". . . a few years back you had an article in the magazine telling about some mill making an experiment with high cylinder speeds on their cards. . . . appreciate locating this article if it is possible."

". . . kindly give me the address of Southeastern Engineering Company which had an ad sometime ago in your paper. . . . "

". . . am an engineer trying to promote a warp knitting plant . . . require some statistics to be incorporated into my survey . . . "

". . . please oblige us with a copy of the *Callaway Textile Dictionary* . . . "

". . . page 131 are two photographs. . . . would you please advise who manufactures these products. . . "

SLASHING HINTS

No. 9 of a series

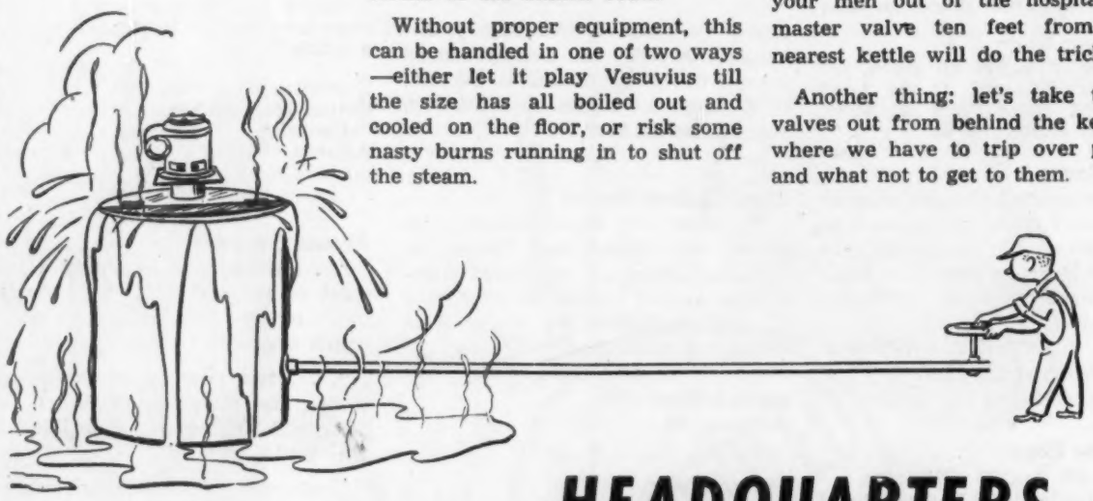
SIZE COOKING EQUIPMENT

Every now and then something goes wrong in size cooking and a batch boils violently over, splashing hot size and steam all over that corner of the slasher room.

Without proper equipment, this can be handled in one of two ways —either let it play Vesuvius till the size has all boiled out and cooled on the floor, or risk some nasty burns running in to shut off the steam.

Steam inlets to the kettles, particularly to the cooking kettles, should be controlled by valves far enough removed for safety . . . keep your men out of the hospital. A master valve ten feet from the nearest kettle will do the trick.

Another thing: let's take those valves out from behind the kettles where we have to trip over pipes and what not to get to them.



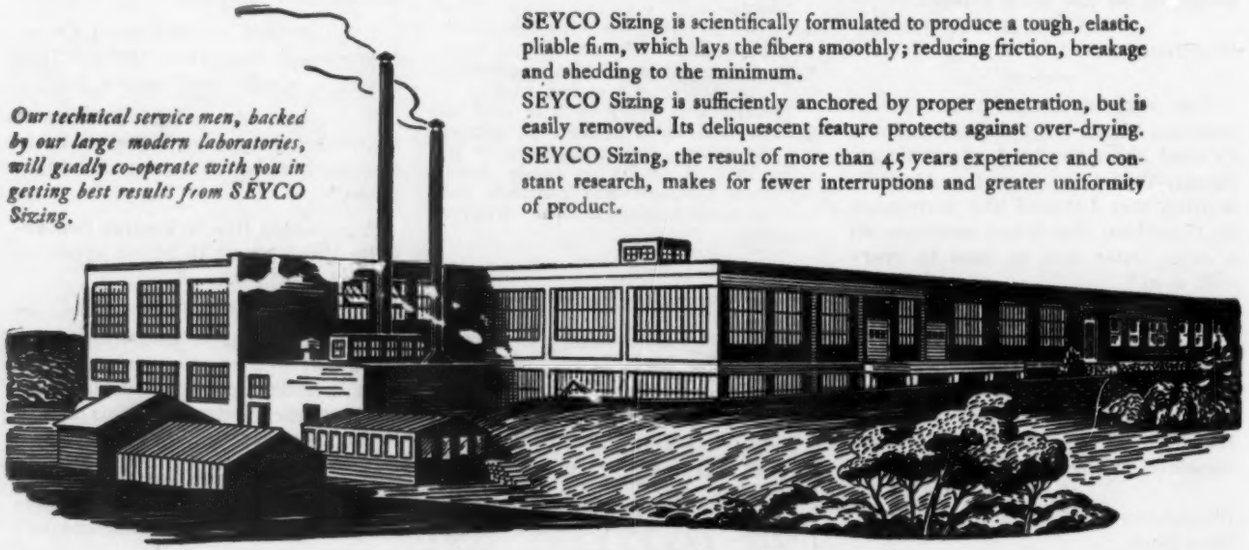
HEADQUARTERS FOR SIZE

Our technical service men, backed by our large modern laboratories, will gladly co-operate with you in getting best results from SEYCO Sizing.

SEYCO Sizing is scientifically formulated to produce a tough, elastic, pliable film, which lays the fibers smoothly; reducing friction, breakage and shedding to the minimum.

SEYCO Sizing is sufficiently anchored by proper penetration, but is easily removed. Its deliquescent feature protects against over-drying.

SEYCO Sizing, the result of more than 45 years experience and constant research, makes for fewer interruptions and greater uniformity of product.



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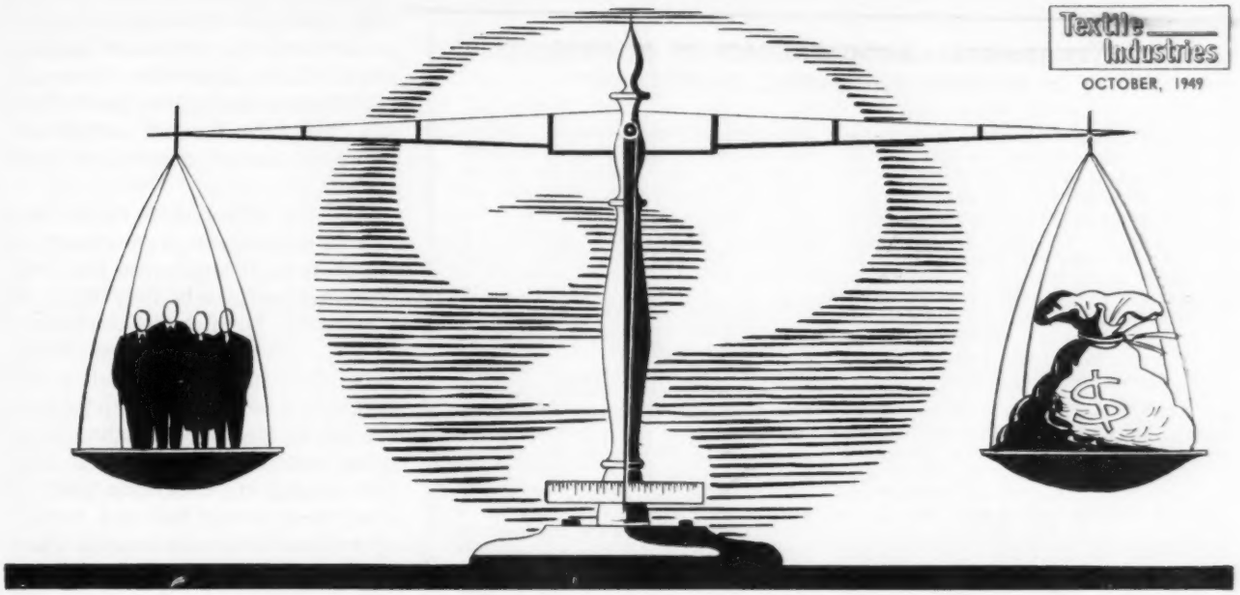


The Future of Personnel Work?

By RICHARD P. CALHOUN

Professor, Personnel Administration
University of North Carolina

EXCLUSIVE

ORGANIZATIONS in textiles, furniture, and other industries have already drawn in their horns somewhat with regard to personnel work. Three companies had assistant personnel directors who were transferred to head up departments in other units or moved to other types of work; their positions in personnel have not been filled. A training director's position vacated by transfer at another company remains unfilled. One concern which was about to start a personnel department is holding off until it feels more certain in what direction the wind is blowing.

These appear to be isolated instances rather than indicative of any general move; however, the vast majority of companies, large and small, have not altered their personnel setups.

When a company casts about for means by which it can cut costs, is it wise to reduce expenditures on personnel work? What about the large number of employee publications, for instance, which have been started in the past five years—will they weather a recession? Are they worth the money they are costing? How about recent expansion in safety, training, and recreation?

No Noticeable Cut-Back in Unionized Plants. No recent retrenchment is noticeable in organizations with unions. Is that because personnel departments have been found to be indispensable in such circumstances? Has the threat of organization impelled other companies to retain many personnel functions which they might otherwise have discontinued? In a nation-wide survey of personnel administrators conducted by the author in 1948, one of the two fields in which personnel men themselves thought they could "contribute the greatest cost reduction over a period of years" was in "labor relations."

For numerous reasons, personnel administration in medium-size and small companies is in an unwarranted position of jeopardy. (*see box on next page.*) Companies which have had personnel departments for a number of years, which have developed departments dealing with

POSITION OF PERSONNEL WORK DURING COMPETITIVE TIMES?

1. What is the place of personnel administration in the textile industry now that a highly competitive market has set in and will very likely continue?

2. Should emphasis on personnel work increase, stay as it is, or be reduced as expendable?

3. Does personnel work pay its way, save a company money, serve as a necessary insurance, or is it a luxury?

WHY PERSONNEL ADMINISTRATION IS JEOPARDIZED IN MEDIUM AND SMALL COMPANIES

1. The contribution of a personnel department is difficult to measure in dollars and cents. For that reason, the work of the department is peculiarly vulnerable to question by those in the organization who are skeptical of its utility or jealous of its functions. Moreover, the department is a ripe plum for plucking by engineering organizations whose living is dependent upon a quick, clearly demonstrated savings.

2. Management in some companies with recently established departments is not fully cognizant of the contribution personnel administration can make toward organizational efficiency. So it is that in these organizations the personnel department has limited functions, restricted largely to peripheral activities which do not tie in closely with the organization's operating needs.

Morale, employee benefits, and recreational programs are worthwhile, but their value is hard to trace. Those organizations in which the personnel department is largely a record keeping, "service," selection-aid type of department may find a need for maintaining continuity with a clerical force, but interviewing new prospects for employment is almost a dead function in numerous organizations.

3. Although many personnel responsibilities remain constant over the years, needs of the times determine the emphasis on specific activities in personnel administration. Safety, attendance, and training problems, as examples, are particularly noticeable in an expanding work force. Other problems tied in with improved standards and curtailment demand a versatile personnel department of professional training or experience and extremely capable persons who are flexible enough to develop with needs of the times. Companies which have obtained personnel departments for specific, special reasons sometime find that present incumbents are qualified only for the performance of those functions.

personnel efficiency, and which have high calibre personnel are not thinking of any curtailment.

Personnel in a Highly Competitive Market. To determine the place of personnel administration when curtailment of business takes place, when costs must be pared, and when functions shift, perhaps it would be best to check over the various fields of activity commonly undertaken by personnel in well-established departments in order to see wherein the department contributes or fails to contribute:

Selection. Hiring of new employees was virtually discontinued in many organizations during the first half of 1949. Should the interviewing of applicants be stopped? Is this a wise policy from a community relations and long range development point of view?

Some organizations think not. In the first place, they would like to have on hand an up-to-date list of employment prospects. In the second place, it should be possible to do a better sifting job and to obtain high-type prospects for any openings which may occur in the future. And, finally, it is a service to the community and its people to extend the courtesy of an interview or at least the filing of an application to those who are unemployed. A person who is out of work feels some encouragement if he knows that he will be considered for any opening which may occur. Organizations feeling a social responsibility toward the community extend preference to those who live in that area.

Training. Employee training on a broad scale has disappeared along with the need for procuring new employees. Actually, in many small personnel departments, even during the war years, training was a function undertaken exclusively by the production end of the business. And yet, this is the other function in which personnel administrators over the country as a whole felt that a personnel department could render the greatest savings to an organization—reduced training time, lessened turnover of trainees, and greater potential efficiency of trainees due to inculcating sound methods habits.

What, then, is the situation during curtailed production and with a market of skilled operatives from which to draw? If you need trained loom fixers, section men, weavers, or knitters, why underake the expense of training when there are plenty to be had at the gate? Here you run into the old arguments for and against promoting from within.

Will you save money in the long run by having an organization in which present employees feel they have a chance; will they stick by you more, have more confidence in you, and put out better? Moreover, from a long headed standpoint, is it wise to run up against the problems of depression years when companies found that they had ageing organizations with no one coming along and in a terrific spot for skilled replacements when times did pick up? Can training ever be dropped when there are questions of taking care of employees with long service, of making shifts within the organization, and perhaps of refresher needs upon rehiring?

Does this period not present an opportunity for developing a personnel department which can assist with more efficient training and follow-up?

Even if one is unconvinced of the need for operative training, there can be no denying the value of supervisory training as a continuing process. And those who have undertaken any considerable amount of supervisory training know that effective training embraces much more than throwing together a series of topics and speakers.

Safety. Accident prevention is another long range job. Safety consciousness is a continuing educational job. Accident rates with many companies are a composite of a number of years of experience. Here, too, it may be shortsighted to let up on safety programs.

Employee Relations. Good employee relations are the product of years of sincere endeavor. It is easy to lose the confidence of employees by a few seemingly opportunistic moves. Employees are particularly sensitive to moves made when labor is somewhat "on its back." And they do not forget. So management has the neat problem of maintaining or discontinuing programs inaugurated in the em-

ployees' behalf. Taking recreational programs as an example, it can be argued effectively that in some respects recreational programs are needed more when employees are on short time than when they are working long hours and preferred to spend their leisure time as they saw fit.

An effective personnel organization will be able to advise management both on the wisdom and on the method of carrying out any projected changes.

Public Relations. Rumors involving half truths and speculation are damning to an organization during periods of unstable production.

"I hear they're going on three days."

"Bill says they're likely to cut out the third shift."

"I heard down town they're going to shut down for three weeks."

"There they've gone and laid off Harry Jenkins after he'd been there twelve years—getting rid of the old-timers when it's toughest for them to get another job."

It is community relations as they affect a company's reputation and its relations with employees which may be even more critical during unsettled times (and what times aren't?). By good publicity and close contact in the community, a good personnel department can help to "lay the ghosts" and enhance regard felt by both employees and community. One authority has said that employees themselves are the best source for creating good community relations. Keeping them informed of moves, explaining the reasons, keeping them apprised of business prospects by employee publications, letters, bulletin boards, through supervisors, and in newspaper write-ups all help.

Organizational Efficiency. More than one personnel man has said that attendance problems cease when the organization goes on four

(*Continued on page* 247)

Cloth Conveyor Connects Mill and Bleachery

Separated by Quarter-Mile of Rough Terrain

Staff Prepared

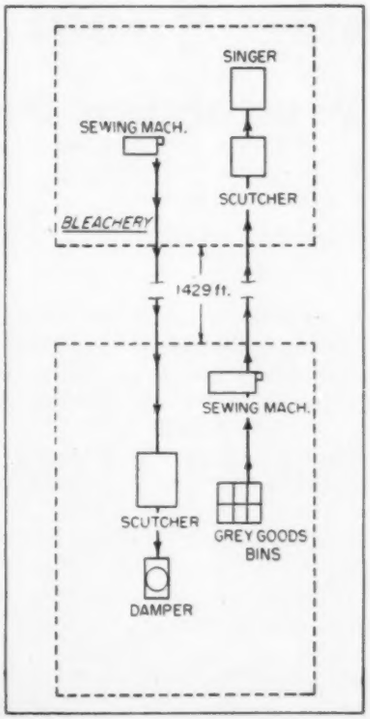
EXCLUSIVE

MATERIALS HANDLING is nothing new or startling to some textile mills. It is an ancient practice for Stevens Linen Associates of Webster, Mass. More than 20 years ago, this company installed a cloth conveyor between a bleachery and grey mill separated by a quarter of a mile of rough terrain.

The system is still unravished by time. An incipient evolution in handling concepts has not detracted any from its efficiency. Designed by Warren B. Lewis Co., an engineering firm now out of existence, the cloth conveyor speeds grey goods and finished cloth through a 1429-foot passageway, constructed of wood and measuring 30″ x 30″ in cross section, at 165 yards per minute.

Water supply and terrestrial considerations dictated construction of the mill some distance from the bleachery some time around 1865 in the vicinity of the French River. As a result, before erection of the cloth conveyor, crash linen towelling in various stages of finishing, had to be transported between plants by horse drawn carts in one phase of the company's long history.

Now towelling passes from the mill's grey bins where it is sewed by a portable stitcher into continuous rope form, through 60 pot eyes and 30 reels stretching between the mill, an underpass to machine shop, through a storehouse, and a sinuous weather protected enclosure is located 12 feet above ground level and leads to the bleachery. The grey goods rope is pulled through the passageway by a powerful scutcher whose 15 hp motor also powers a mangle and singer.



At the bleachery, grey rope is cut into varying lengths for the kiers, depending on the style order which is transmitted by telephone. Telephone lines are enclosed in the passageway also. A warning signal at the bleachery scutcher is sounded by an operator in the grey mill when rope is running out. The scutcher operator normally cuts off power when the alarm is sounded.

Sometimes, however, the rope does run out and towelling must be rethreaded through pot eyes.

After finishing, another continuous rope of goods is sewn at the bleachery by a portable stitcher. This rope of finished towelling is driven back through the conveyor by a scutcher located at the grey mill end. Here, the goods are sent through a damper and finally to packaging. The alarm system prevents run-outs.

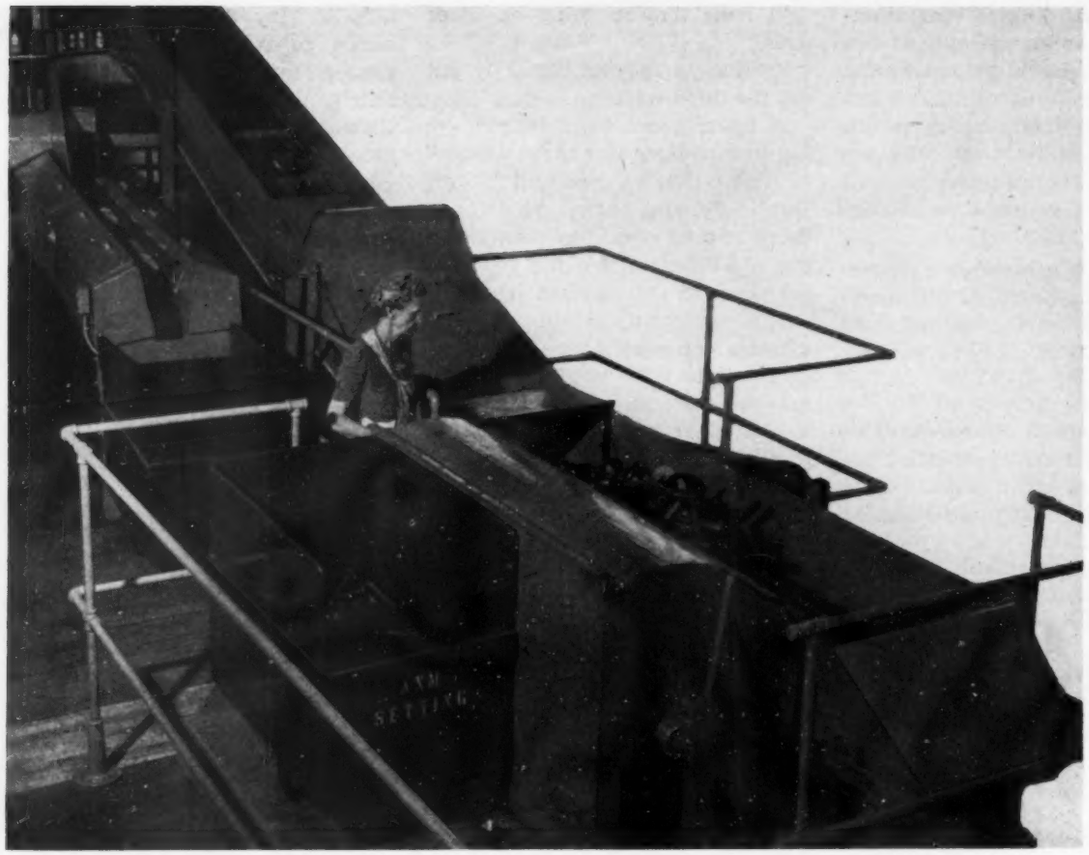


Fig. 1. The mechanical spool sorter receives spools in miscellaneous sizes from collecting trucks, which bring spools in from setting banks. Trucks are positioned on a tilting table that automatically tilts truck and loads contents onto a primary conveyor, feeding to a vertical apron.

Automatic Spool Sorter

Solves Production Problem

Photos courtesy, Alexander Smith & Sons Carpet Co.

UNCORKING production bottlenecks is one of the duties delegated the Mechanical Research and Development Section of the Alexander Smith and Sons Carpet Company. The section's latest uncorking operation resulted in a unique machine which sorts various types of spools at high speed.

A spool-sorting problem had been the bane of existence for years at the Axminster mill's setting department. Thousands of winder tubes and spinning spools in a variety of shapes and sizes are removed from setting frames after the packages are unwound. Before these tubes and spools are again distributed for rewinding, they must be sorted.

Manual sorting was a tedious, time-consuming function. Besides the considerable labor costs involved, backlogs of unsorted spools interfered with the smooth flow of production between setting and winding departments.

Chief of the Mechanical Research and Development Section, Charles E. Barrett, opined that sorting could be mechanized. Plans and blueprints were drawn up by John V. Curran, Jr., and out of it all developed a mechanical spool sorter, six feet wide and some thirty feet long.

Capable of sorting more than 300,000 spools weekly, the machine has created a new job within the physical capacities of a woman or a disabled person.

Fig. 1 shows the entire machine. The other views are close-up shots of the component sections.

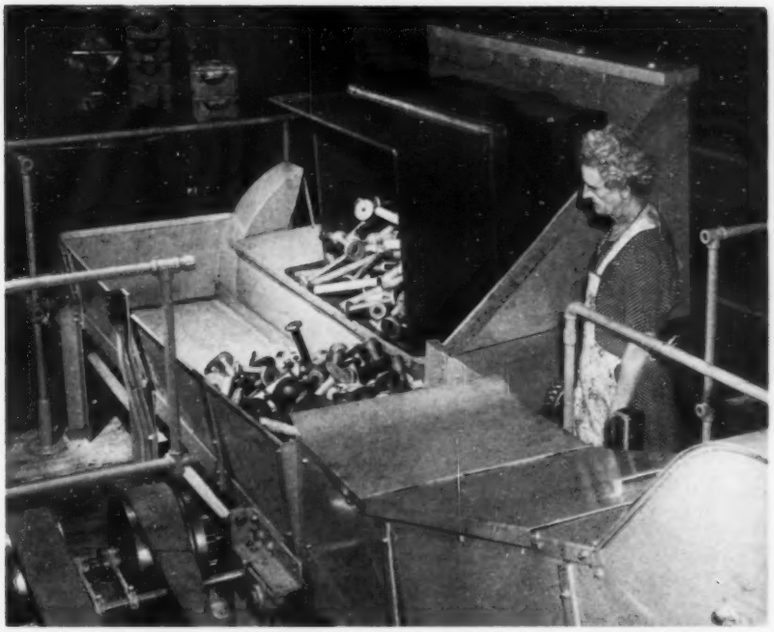


Fig. 2. Spools and tubes are transported uphill on the secondary conveyor. Total distance traveled from tilt-table is 30 feet. Lattices on secondary conveyor limit the number of spools and prevent spools from slipping off apron.

Fig. 3. Secondary conveyor deposits cargo onto an alignment disc where spools are settled on one level and in single file. Spools are carried to the perimeter of the rotating alignment disc by a combination of centrifugal and gravitational forces, and dropped into separator.

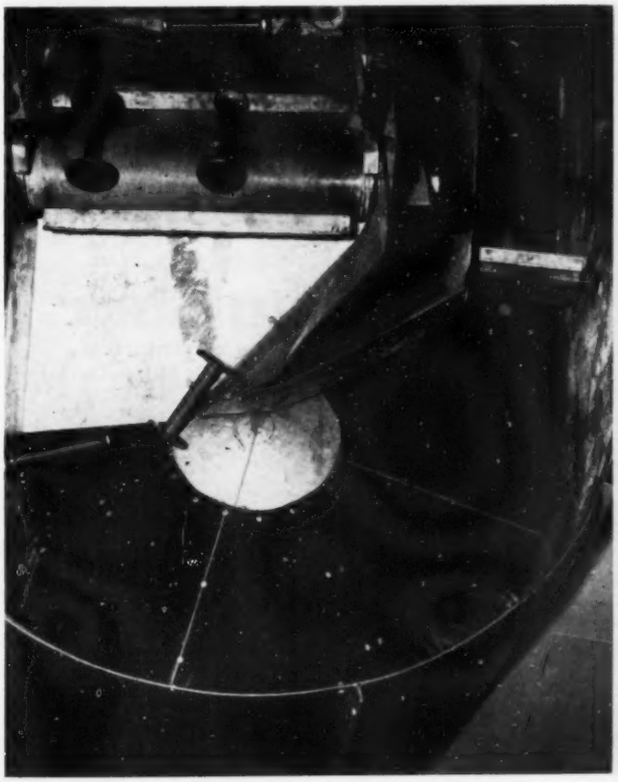
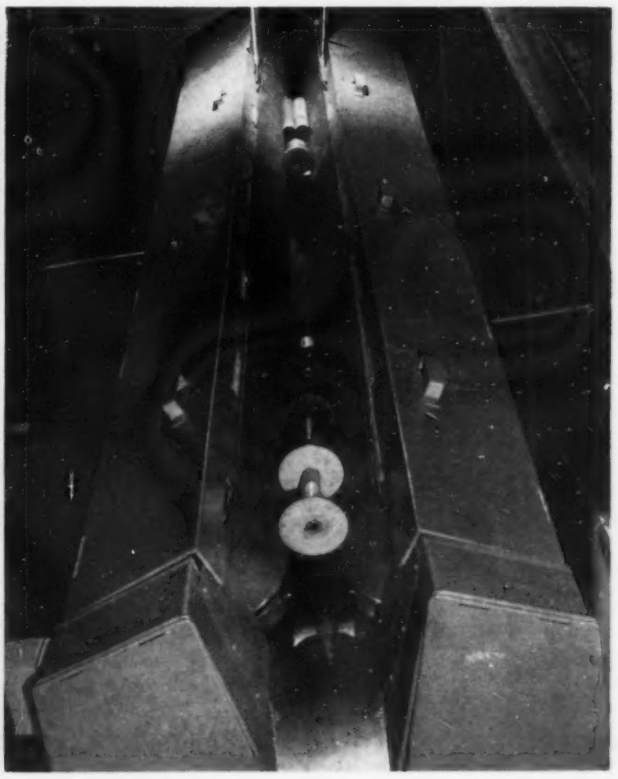
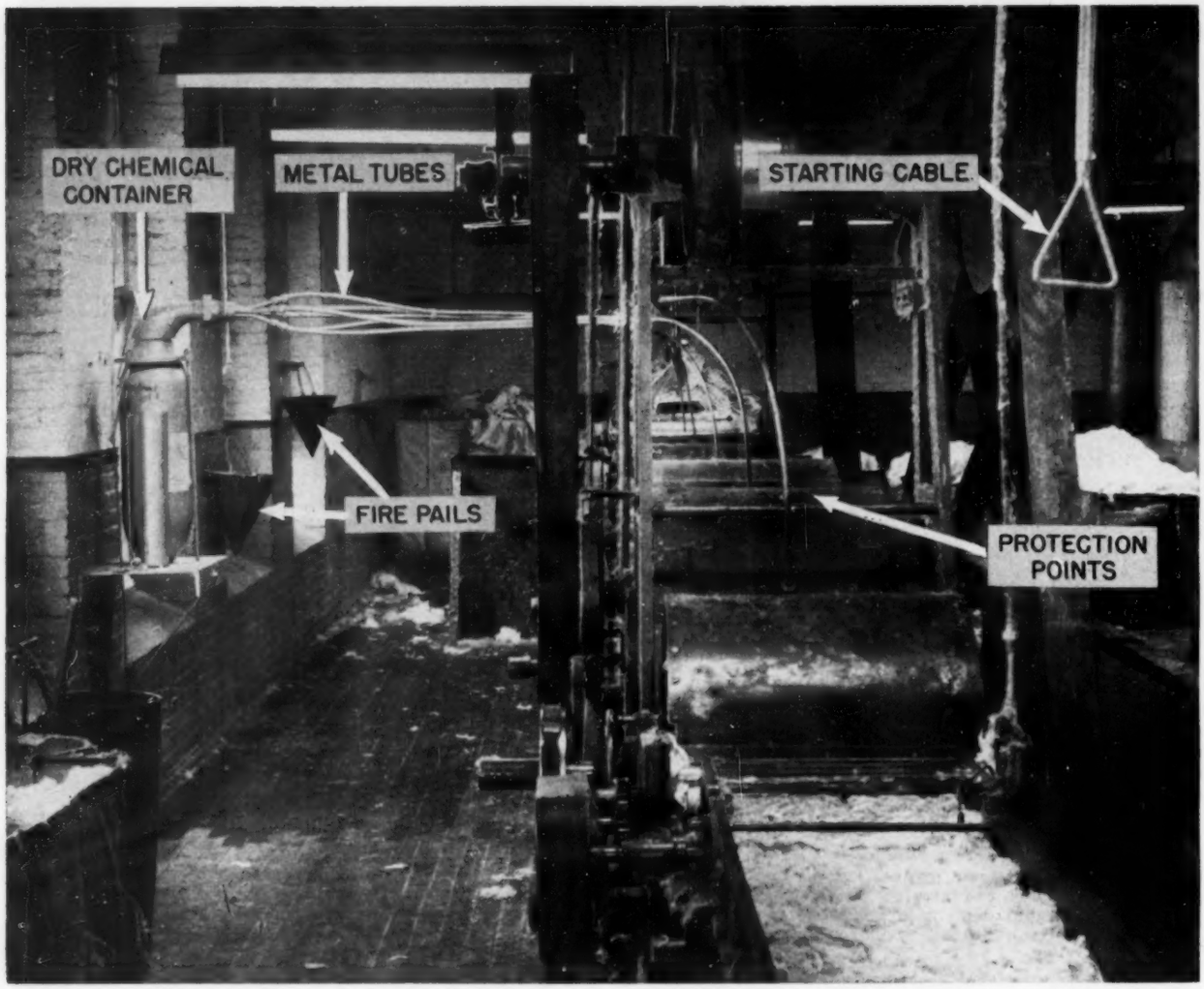


Fig. 4. Separator consists of a pair of diverging flat belts between which is a long aperture, wide at one end and narrow at the other. Narrow spools fall through at the narrow segment. Wider spools drop through the slot at successively wider divergencies of the belts. Spools fall into trucks underneath.





Cost of Fires in Waste Machine Reduced by

EXCLUSIVE

Dry Chemical Fire Extinguisher

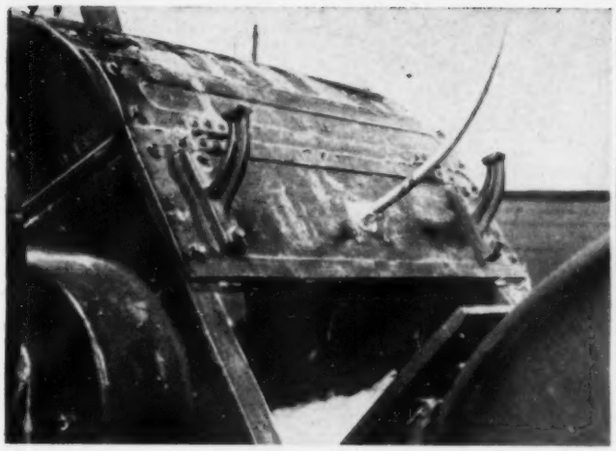
Staff Prepared

"THE DRY chemical fire extinguisher installed on our five-section garnett machine snuffed out a fire so quickly—there just was no fire," said an Alabama mill manager who was describing the results of the semi-automatic system employed on the waste machine.

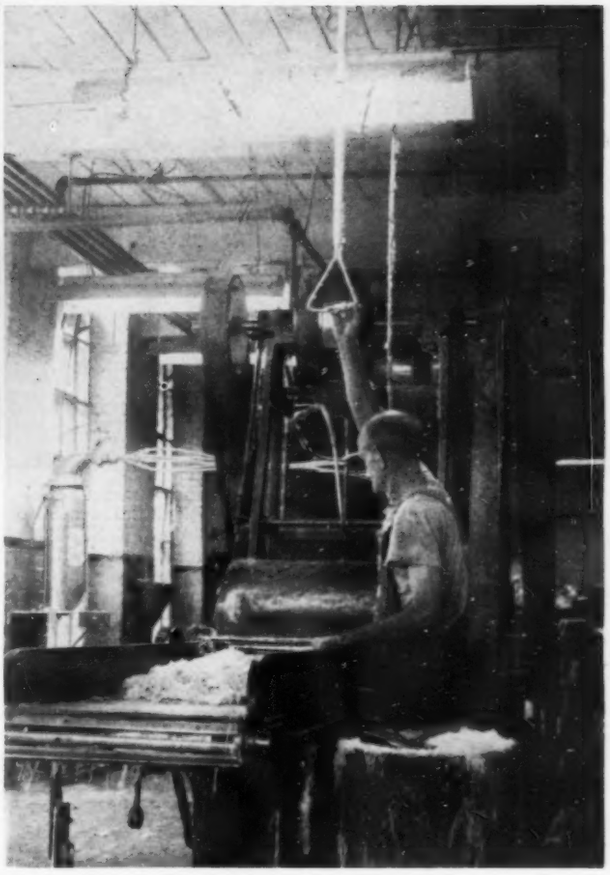
According to the experiences related at this plant, waste fires are put out in a matter of seconds without the use of water by this fixed installation, and the machine may be started up promptly without the necessity of cleaning out the stock already in the beater and screen sections when the fire starts.

The main chemical container for the fixed installation is attached to the wall. Metal tubes lead from this container to each of the screen sections on the hard waste machine, which processes thrums and cloth. One tube is located directly above the delivery apron. This makes a total of six protection points should a fire occur. The dry chemical is instantaneously forced through the tubes by carbon dioxide gas.

Procedure for Putting Out Fires. Should a fire break out in the



Showing how the metal tube joins the screen section on the waste machine.



Operative prepares to pull release cable to extinguish fire. When he removes his hand, the supply of chemical extinguisher is stopped.

waste machine, the operative who is usually working from the feed end of the machine simply reaches above his head and pulls the cable, thereby releasing the dry chemical to spray the sections.

Formerly the system was designed to deplete the supply of dry chemical extinguisher in the container, but experience indicated that the full supply was unnecessary to extinguish the average fire. Now the operative holds the cable until the fire is out, and when he releases it the supply of chemical is stopped. This not only saves time, but prevents the use of more chemical than is necessary to extinguish the fire.

The cost of a fire in the waste machine was figured roughly at four hundred dollars. This included the cost of the stock in process, replacement of the lag cylinder, labor to clean and start the machine, and drying of wet cotton caused by sprinklers set off, but it did not cover the cost of lost time. Also, the garnett tender advised that after he had previously extinguished the fires with water, the machine did not operate properly for about a week because of rust. This condition no longer exists.

Now when a fire breaks out the operative only has to stop the machine, hold the cable for a few seconds, and then start the machine. Stock in the machine is continued in process unless the fire went unnoticed so long that the stock was considerably damaged.

Immediately following a fire, the dry chemical container is recharged and ready for action. To prevent unauthorized persons from tampering with the system when the waste machine is not running, a lock is inserted in the cable.

The mill manager considers the system applicable to pickers, which operate on the same principle. It is known that the fixed installation dry chemical extinguisher is employed in opener lines.

The extinguisher is known as the Keefe and is manufactured by International Chemical Extinguisher Corporation of Atlanta, Ga. The semi-automatic system on the waste machine in the Alabama mill was installed by Keefe & Company, Atlanta, Ga.

Facts about the Dry Chemical Fire Extinguisher

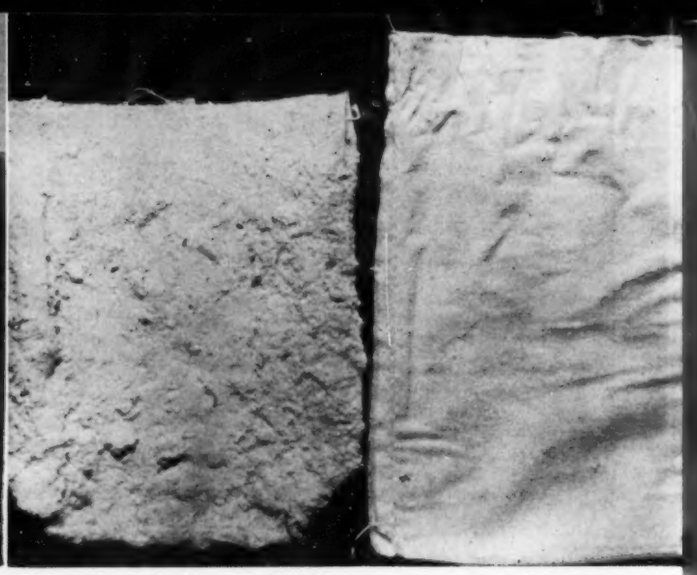
The chemical container is made of aluminum alloy. Unless used the unit need not be recharged. The chemical will not freeze, evaporate, or corrode, and is sealed against contamination. The chemical is non-abrasive, non-injurious, a non-conductor of electricity, non-poisonous, and is harmless to fabrics, machinery, humans, or animals.

"Cotton Process Fires" Protection Table

Opener Rooms—Waste Recovery

Locate a 15-lb or 20-lb dry chemical extinguisher within 50 feet of any point. In areas having several opener lines, it may be advisable to install one such extinguisher for each line and provide small hose at stations located so that the entire area can be covered. A few fire pails should be provided.

From Factory Mutual Bulletin of Loss Prevention No. 12.75



The U. S. Department of Agriculture's new insect-repellent treatment is applied on an experimental scale to cotton bag cloth by W. D. Strickland (left) and F. F. Flynn at the Southern Regional Research Laboratory in New Orleans, La. Photo at right shows effectiveness of treatment. At the extreme right is a view of the inside of a cotton bag which has been given the new treatment. Note that it shows no evidence of insect infestation after exposure for several months. Compare this with the bag at the left which was not treated and was exposed during the same period. It was completely covered with dense webbing made by larvae of the Mediterranean flour moth.

Insect-Proofing Cotton Bags

Report of a study made under the Research and Marketing Act

INSECT infestation of milled cereal products after they have been bagged or packaged is a matter of great concern to manufacturers, marketers, and consumers of such products. Insects readily enter paper bags and fiber-board packages through small openings at the point of closure, through needle holes in sewn bags, or by boring directly through the paper or fiber board. The resistance of fabric bags to insect entry depends on the kind of fabric. The coarser the weave, the more easily the fabric is penetrated. Adult insects may thrust their ovipositors through the fabric and deposit their eggs in the food material within, or the small larvae may crawl through needle holes along the seams and at the top of the bags, or directly through the meshes of the fabric.

IT WAS thought that the method of insect-proofing bags offering most promise was impregnation of the material with a chemical repellent. In experiments since 1940 many chemicals have been applied to paper and fabric bags by dipping or by incorporation in sizing or coating materials. Toxic materials such as DDT were found to give excellent protection, but were not considered suitable for use with fabric bags because it was difficult to combine them with the fabric in such a manner that they would not contaminate the packed product. A repellent that was nontoxic to warm-blooded animals appeared to be necessary. In 1943 paper impregnated with pyrethrum extract was found to be an excellent insect repellent.

By RICHARD T. COTTON[1], JUSTUS C. FRANKENFELD[2] and W. B. STRICKLAND[3]

1, 2. Division of Cereal and Forage Insect Investigations, Bureau of Entomology and Plant Quarantine, Dept. of Agriculture.

3. Southern Regional Research Laboratory, Bureau of Agricultural and Industrial Chemistry, Dept. of Agriculture.

In June 1946 various mixtures of pyrethrins with piperonyl butoxide or piperonyl cyclohexanone were obtained for testing. Two formulations—0.5% of pyrethrins plus 5 % of piperonyl butoxide and 0.25% of pyrethrins plus 5% of piperonyl cyclohexanone—both in deodorized kerosene with an emulsifier added, were used to impregnate both paper and cotton bags. These formulations were used both at full strength and in dilutions in water at 1 to 9 and 1 to 14 parts by volume. Both kinds of bags treated with these mixtures at full strength gave excellent resistance to penetration for a long time.

Impregnated cotton bags filled with insect-free flour were exposed to heavy infestation from July 1946 to July 1947. On examination the bag treated with the pyrethrins-piperonyl butoxide formulation contained 2 dead flat grain beetles (*Laemophlocus minutus (Oliv.)* and the bag treated with the pyrethrins-piperonyl cyclohexanone formulation contained 1 dead confused flour beetle (*Tri-*

(*Continued on page* 264)

Textile Industries *Presents Its*

10th Modern Equipment and Processing Review

THE INFORMATION contained in this tenth Modern Equipment and Processing Review number pertains to equipment and accessories made available to the textile industry since November 1948, or describes improvements made on existing equipment since then.

Many new items are described here for the first time. Such an issue has been found by readers to serve as a permanent reference.

The entire section was prepared from information furnished by cooperating companies.

All items are keyed. Where additional details are desired by the reader, they may be secured by using the request card on page 262.—The Editors.

Horizontal Jacketed Kettle for Cooking Size

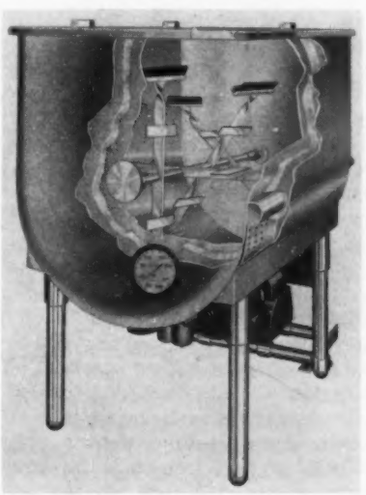
The "San-I-Tank" is a horizontal, semi-cylindrical tank which is jacketed, instead of being equipped with a coil, and insulated with rock wool between the jacket and the outer metal surface.

A horizontal shaft is equipped with eight T-shaped stirring arms, having neoprene blades about a foot long which scrape the bottom and most of the side of the tank. This gives a tumbling action to the mix, and acts positively to prevent accumulation of starch lumps on the bottom of the tank.

The kettle jacket does not go around the ends of the kettle, nor above the contact surfaces of the scraper blades, so that all of the heated parts are continually scraped, giving practically no caking tendency.

Unmixed size cannot collect in the valve opening, since the valve is the flush type, with its seal level with the bottom of the kettle.

Horizontal size kettle (Metal-Glass).



Metal-Glass Products Co., Belding, Mich.

For additional data, request item J-189, using business reply card on page 262.

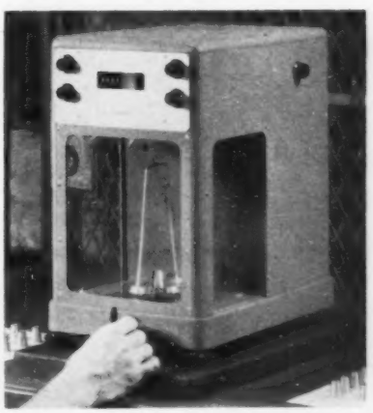
Direct-Reading Balance Speeds Laboratory Work

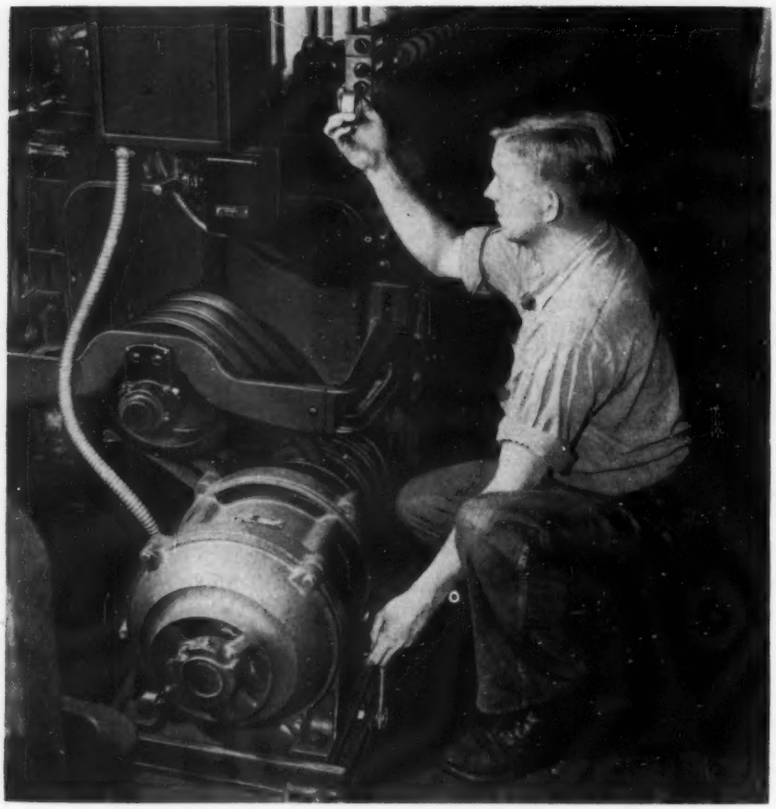
Weighing samples for moisture content, etc., to 1/20 of a milligram with analytical balance accuracy, but in one-third the usual time, is said to be possible with a new direct-reading instrument called the "Gram-atic Balance."

The new balance has only one pan, and the weight reads directly on a scale at eye level. The balance has all required weights built-in and manipulated by turning four external knobs. No weights are handled; weights less than 0.1 gram are indicated optically and automatically.

Total weight is read directly from

Direct-reading balance (Fisher).





Easily adjustable speed control (Allis-Chalmers).

a scale on the instrument panel. The sample to be weighed can range from 200 grams to 0.0001 gram. Beam of the balance has a constant load; hence, sensitivity remains constant regardless of sample size.

Because of its speed and simplicity of operation, the new balance is ideal for production control at test stations in textile plants.

Fisher Scientific Co., 714 Forbes St., Pittsburgh, Pa.

For additional data, request item J-158, using business reply card on page 262.

Speed Changes Easily Made with New Type of Control

An economical and efficient form of speed control for applications requiring frequent speed changes or for making adjustments without shutting down the drive is now available.

The combination consists of a new Vari-Pitch automatic sheave, companion sheave, wide range Texrope belts and Texslide motor base. It is said to be easier and smoother starting and is being used for motion control speed change ratios up to 2 to 1.

Desired speed variances of the driven machine are quickly obtained by simply turning the adjusting screw on the Texslide motor base with any commercial wrench.

Allis-Chalmers Mfg. Co., Milwaukee, Wis.

For additional data, request item J-412, using business reply card on page 262.

Gas-Powered Fork Truck Features Fluid Drive

A new line of gasoline-powered industrial trucks features fluid drive, automotive controls, hydraulic piston lift, and low-mast heights with high free lifts.

The fluid coupling permits the operator to progress from slow to fast speeds, and vice versa, without operating clutch or gearshift levers.

The hydraulic lift is actuated by an exclusive ram within a ram which gives two stages of elevation.

The Lift King gas truck is designed so that anyone who can drive a car can operate the truck. Driver's seat on the left, horn on steering wheel, foot pedal accelerator, foot brake, and mast control similar to the shifting lever in the modern car, make for simplicity of operation and shorter operator training periods.

One of the special virtues of the gas truck line is high lifting speeds, of 30 feet per minute at full load.

Yale & Towne Mfg. Co., Phila. Div., Philadelphia, Pa.

For additional data, request item J-229, using business reply card on page 262.

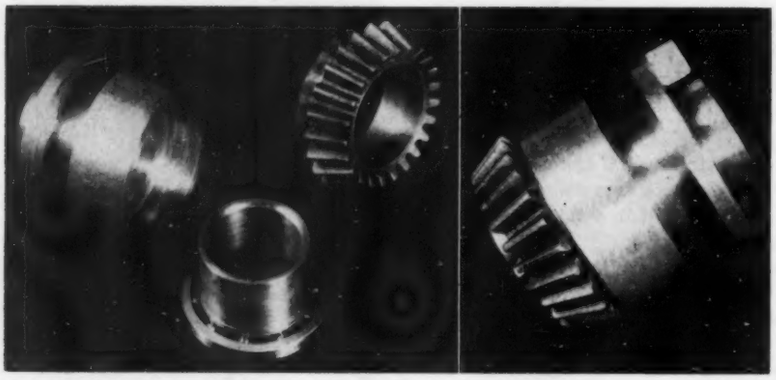
Ball Bearing Bobbin Gears

A recently announced bobbin gear is equipped with a sealed ball bearing that is designed to take many times the normal thrust found in actual mill operations. Said to eliminate the oiling of the bolster when it is used, the lightweight aluminum upper portion of the unit has pressed-in, turned bronze bushing. The permanently self-lubricated unit will eliminate many maintenance difficulties, according to the company.

The gear portion is made of extra-hard, alloy steel with precision cut tooth. Individually threaded, the detachable and replaceable gear screws into the upper aluminum section. Claims for the gear are that it operates with less noise and less vibration, and permits higher speeds.

Supplier of the gear can furnish the companion skew-bevel plate gear (bobbin drive gear) which is also cut-tooth of cast iron, but the new

Ball bearing bobbin gears (Comer-Whittier).



gear now available will run with existing or conventional cast gears.

Comer-Whittier Shops, Inc., 308 Ivy St., N. W., Atlanta, Ga.

For additional data, request item J-411, using business reply card on page 262.

Textile Printing Machine Has No Back Grey or Cylinder

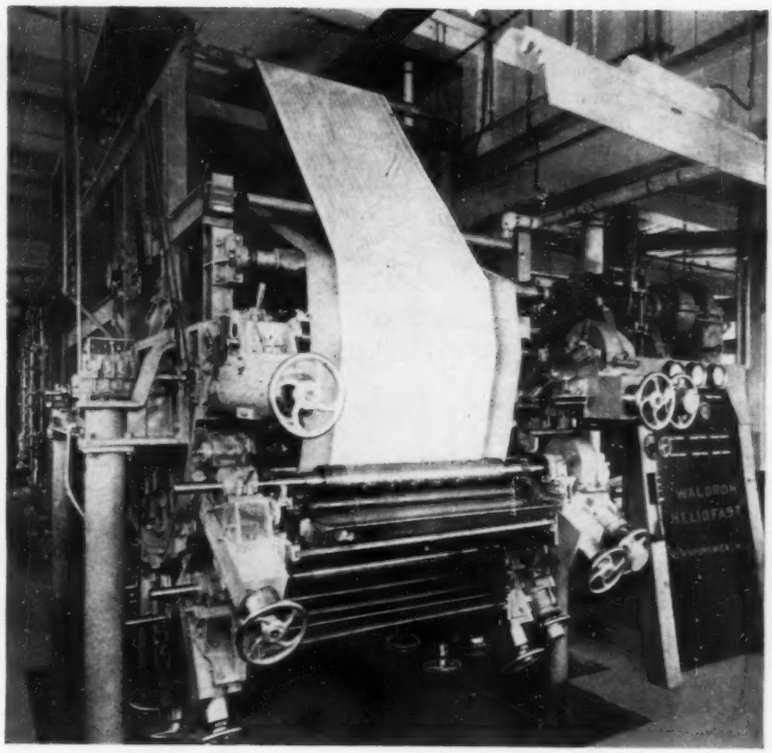
The "Heliofast" textile printing process accomplishes high speed multi-color textile printing without a back grey and without a cylinder.

The printing operation by the Heliofast process goes from nip to nip, maintaining commercial register at speeds of 230 yards per minute, according to the manufacturer.

Much sharper and more clearly defined printed patterns are being produced with the smaller arc of printing contact in this process, it is claimed.

John Waldron Corporation, P. O. Box 791, New Brunswick, N. J.

For additional data, request item J-274, using business reply card on page 262.



The "Heliofast" textile printing machine (Waldron).

Winder Bobbin Drive Lowers Winding Costs

The Winder Bobbin Drive, developed for use in mills processing silk, rayon or nylon, functions as a conversion item by which skein winders, redrawing frames, etc., originally equipped for winding by means of one of the many types of winder spindles, are converted into what is described as a more modern and efficient means of bobbin winding.

Features claimed include: cork-covered steel driving head (ball bearing); leather facing; spring controlled center automatically adjusts to bore of bobbin; adjustment for different length bobbins; strong spring keeps bobbin in contact with driving head; ball bearing.

Collins Supply & Equipment Co., 1355 Monsey Ave., Scranton 2, Pa.

For additional data, request item J-139, using business reply card on page 262.

Warp Bobbin Stripping Machine

A warp bobbin stripping machine for cottons and rayons was recently placed on the market.

Floating, oscillating, revolving knives strip the yarn down to the last thread without touching or injuring the bobbin head or barrel, according to the manufacturer. Production claimed is 2400 per hour.

Sjostrom Machine Co., Lawrence, Mass.

For additional data, request item J-268, using business reply card on page 262.

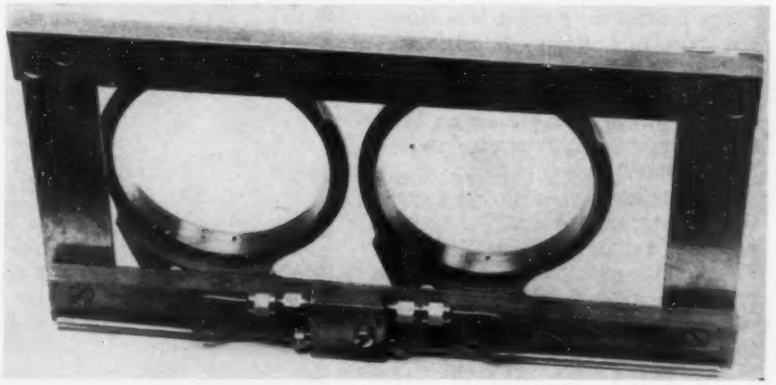
Automatic System for Spinning Ring Lubrication

To decrease traveler friction and wear, an automatic system of spinning ring lubrication has been developed. This system can be mounted on a frame at time of manufacture or after installation of the machine in a mill.

The system for small rings consists of three basic units. A lubricator force-feeds a measured volume of clean oil at regular intervals. A single line of tubing distributes oil to junctions, one between every two rings. A meter-unit, two in each junction, apportions the correct film of oil to each ring.

There are two types of ring feed available. One feeds oil directly to the ring. The other feeds oil to a reservoir from which a felt wick car-

Automatic system for spinning ring lubrication (Bijur).



ries oil to the ring. The traveler is lubricated as it brushes past the wick on each ring rotation.

Filters in both lubricator and meter-unit, and the "closed" distribution system assure that only clean oil reaches friction points and eliminates the throw of lubricant onto material in process.

Bijur Lubricating Corp., Long Island City, N. Y.

For additional data, request item J-123, using business reply card on page 262.

Special Industrial Paint for Varied Applications

Millwite is a specially prepared paint for varied industrial use. It is a heavy, white semi-paste that is economical to use either by brush or spray.

Millwite's extreme whiteness is primarily due to the fact that it is a titanium dioxide paint with exceptional hiding and coverage qualities, according to the manufacturer. It can be applied to wood, concrete, plaster, wallpaper, brick or any other interior wall surface. Various tints may be added as desired.

Stonhard Company, 1306 Spring Garden St., Philadelphia 23, Pa.

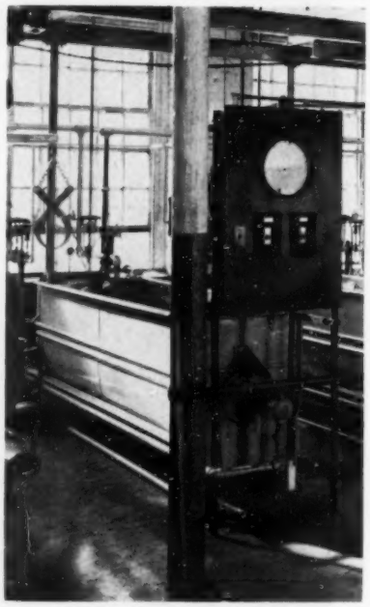
For additional data, request item J-206, using business reply card on page 262.

Compact Automatic Control for Hot Water Finishing

Complete automatic sequence-cycle control of a hot water finishing machine for face-finish fabrics, such as broadcloth and cloakings and for certain synthetics, is now available. The complete cycle, which takes about 40 minutes, includes automatic operation of six control valves and the circulating pump.

The control instrument is a standard recording Rotax (electric operated) temperature controller. It is mounted on a black-enamel steel panel, which also contains two timers, an "On-Off" master switch, and a "Start" button.

If emergency arises during a cycle, the operator pushes the "Off" button and all valves immediately close. Pushing the "On" button will then reset the timers to the beginning of the cycle. A complete and uninterrupted record for the day is provided by the controller's chart, insuring uniformity of production for day-to-day operations.



Automatic controls for hot water finishing machine (Foxboro).

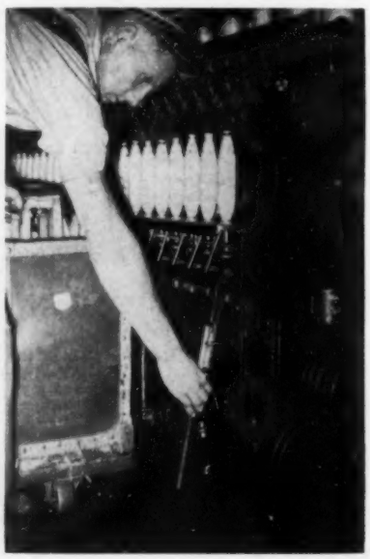
The Foxboro Company, Foxboro, Mass.

For additional data, request item J-157, using business reply card on page 262.

Handy Bobbin Lifter Speeds Doffing

A mechanism that lifts all the bobbins on a spinning frame simultaneously at doffing time, has been developed.

Bobbin lifter (Precision).



The bobbin lifter consists of a rail extending from one end of the spindle rail to the other; there are lifter fingers on this rail spaced one to each spindle. The lifter is supported by pivoted rods along this rail at regular intervals along the length of the frame.

A lever operating on a pivot at one end of the frame serves to push the lifter finger rail upward at doffing time. When the lifter rail is pushed upward by action of the lever, this brings all the lifter fingers in contact with the base of the corresponding bobbins. After the lifter fingers are brought into contact with the base of the bobbins, the doffer exerts a final push on the lever which lifts all bobbins on one side of the frame at one time; the frame is then ready for doffing.

The advantages claimed for the bobbin lifter are: less time and physical energy consumed in doffing, and reduction of processed waste or tailings.

Precision Gear and Machine Co., Charlotte, N. C.

For additional data, request item J-257, using business reply card on page 262.

Acrylic Resin Dispersion Available in Non-Ionic Form

Rhoplex FRN is the latest addition to a versatile series of aqueous dispersions of acrylic resins for textile finishing. It is offered in non-ionic form, and is, therefore, compatible not only with a wide range of concentrations of acids, bases, and salts, but also with most commonly used textile finishing agents.

The elasticity of the resin film and its good stability to ageing under all conditions make it particularly valuable for textile finishing, according to the manufacturer.

Rhoplex FRN is supplied as an aqueous, solvent free, milky dispersion containing 40% resin solids. It is readily miscible with water in all proportions and since it forms a clear film, does not cloud dyed or printed shades.

The product may be used as a self-finish or it may be applied together with other finishing materials, if required, by a one-bath application, without fear of coagulation or precipitation. It may be used in the same bath with durable or non-durable water repellents to saturate the fabric and in this manner reduce the impact penetration of water. It is also recommended for applica-

tion in the same bath with thermosetting resins.

Rohm & Haas Co., Washington Square, Philadelphia, Pa.

For additional data, request item J-197, using business reply card on page 262.

Spooler Bobbin Loading Machine

A Spooler Bobbin Loading Machine has been developed which can be designed to accommodate various size doffing boxes directly from the spinning room, or bobbins from bins, thus eliminating unnecessary handling.

Boxes of yarn are placed on the elevating cradle of the machine, and by a simple mechanical movement the box is securely fastened to the elevating cradle. As the operator moves the portable machine toward the spooler, turn of the crank causes the cradle platform containing the box of yarn to rise vertically into dumping position. As the crank is turned, the bobbin container shifts forward so that the bobbin box overhangs the spooler trough. Additional turning causes the bobbin container to assume a slightly inverted position, thereby completely emptying the bobbins.

During the entire operation the machine is automatically locked in all positions of the dumping cycle, allowing the operator to leave at any time.

Sunray Company, Spartanburg, South Carolina.

For additional data, request item J-266, using business reply card on page 262.

Interval Timer for Control of Electrical Equipment

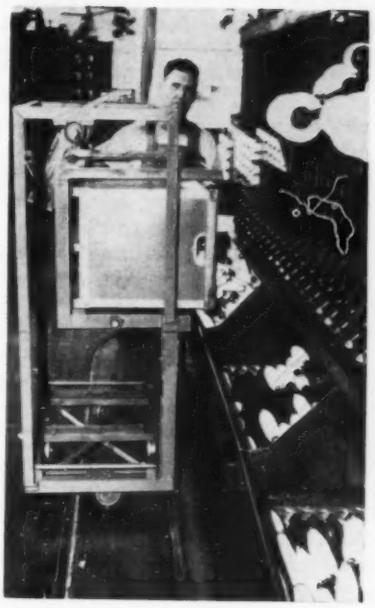
Type IE Interval Timers are designed to: (1) Close or open a single circuit automatically at the end of a chosen time interval; or (2) automatically close one electrical circuit and open a second at the end of the selected time interval.

Typical uses are time control of electrical yarn dryers, automatic mixers, extractors, laundry machines, ovens, etc.

The timers are available in ten different time ranges with scales running from 15 seconds to 24 hours. Optional features include: delayed start which permits starting the timer without operating the switch or starting the time cycle; adjustable stop—an arm attached beneath the pointer permits exact repetition of the time setting for each operation.

The R. W. Cramer Co., Inc., Centerbrook, Conn.

For additional data, request item J-140, using business reply card on page 262.



Bobbin loading machine (Sunray).

Slasher Room Controls Feature Rugged Construction

A new system of slasher control consists of: (a) self-operated size box temperature controller with a built-in indicating thermometer; (b) pneumatic operated size box control to insure a constant level in the size box at all times; and (c) self-operated cylinder temperature (pressure) controller.

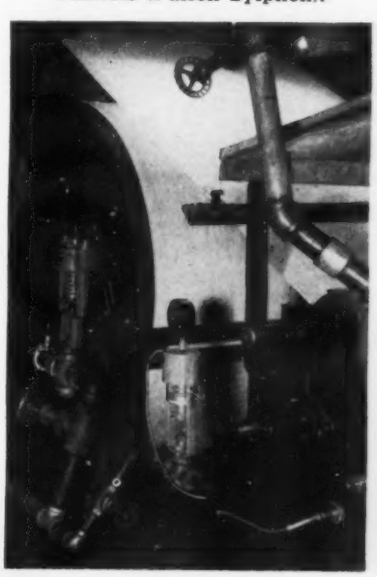
Size cooking and size storage controls are also available. The size storage control insures a supply of size at the proper temperature ready for use.

A special feature claimed for this equipment is its rugged construction. Due to the simplicity of these controls, any plant maintenance man can install and service them, according to the manufacturer.

Fulton Sylphon Division, Robertshaw-Fulton Controls Co., Knoxville 4, Tenn.

For additional data, request item J-244, using business reply card on page 262. Please specify item.

Cylinder and size box temperature controls (Fulton Sylphon).



Hold Down Hook for Worsted Frames

A hold down hook, Specification 58-2.5, for Prince, Smith & Stells and Saco-Lowell worsted spinning frames has been developed.

The hook is a porous, self-lubricating, sintered bronze, of special alloy designed to give maximum service under severe conditions of wool fly. Laboratory tests indicate this bearing will run a year and a half without any oil whatsoever, according to the manufacturer; it is recommended that it be lubricated with only a few drops of oil once a month mainly for cleaning purposes.

The following advantages are claimed: no oil stain on yarn; less fly adheres to machine; less down time for cleaning; low coefficient of friction; less shaft wear; installation is easy.

Neveroil Bearing Co., Wakefield, Mass.

For additional data, request item J-455, using business reply card on page 262.

Automatic Dye Jig Drive

A new drive, called the Autojig has been designed for automatic and tensionless operation of any ordinary standard jig. The drive is a self-contained unit.

The base section contains a totally enclosed 2-hp constant speed motor and its controls. The center section contains all the mechanical gearing, submerged in oil, and also enclosed. Time reversing and passage indicator

mechanisms are contained in the top section.

Stopping is automatic when the required number of passages has been made.

B. F. Perkins & Sons, Inc., Holyoke, Mass.

For additional data, request item J-601, using business reply card on page 262.

New Method for Twist on Monofilament Nylon

A new test method for accurately determining twist in 15 denier and other monofilament nylon yarns has been developed. The method utilizes a new type of take-up device.

This new service is available to throwsters, hosiery manufacturers and other segments of the textile industry interested in twisted monofilament nylon.

United States Testing Co., Inc., 1415 Park Ave., Hoboken, N. J.

For additional data, request item J-602, using business reply card on page 262.

Flat Bed Seamer

The Type 1101 industrial sewing machine is organized with two needles and two loopers, producing two rows of the double-locked chainstitch (Federal stitch Type 401).

The machine, designed primarily for sleeve setting in shirts, pajamas, dresses, etc., can also be used for two-needle lap seam felling operations on a myriad of garments made from many different grades of material.

A newly designed compensating foot with flexible heel and toe principles for crossing bulky seams is constructed with yielding sides which permit instant change from light to medium-weight fabrics without adjustments or interchange of parts.

Another development is the lubrication system.

Accurate margin control is assured with the "needles in line" set-up, while the thread handling means is located at a convenient point in front of the machine, with all threads enclosed in newly-designed guides to prevent whipping or snarling as the threads pass through at high speed. This eliminates unnecessary thread breakage.

Willcox & Gibbs Sewing Machine Co., 214 West 39th St., New York 18, N. Y.

For additional data, request item J-285, using business reply card on page 262.

Running Time Meter Records Mule Operation

Type E Running Time Meters are designed for use on alternating current circuits to automatically and cumulatively register the total operating time or idle time of any circuit, machine or system to which they are connected.

Some typical uses are to indicate the total number of hours of operation of automatic pumps and machines, thus forecasting the need of servicing and replacing worn parts; to check the numbers of hours of operation of equipment or material to be tested, as in laboratories, etc.; as well as many industrial applications where the recorded number of operating hours or idle hours is important.

According to the manufacturer, these meters have been found useful on mules in woolen mills for the purpose of recording the actual number of hours and tenths of hours that the mules are in actual operation.

The R. W. Cramer Co., Inc., Centerbrook, Conn.

For additional data, request item J-141, using business reply card on page 262.

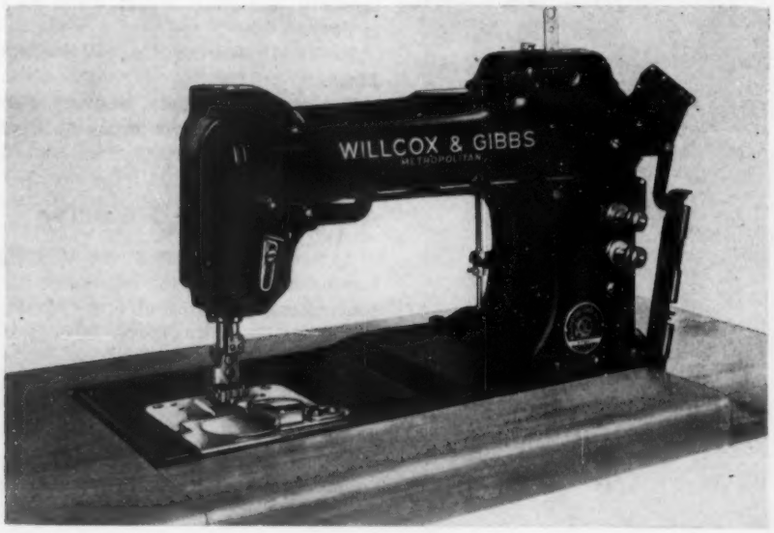
Four-Color Magazine Electrically Operated

A new Upright Magazine for pick and pick and 2 x 1 looms was recently developed. Designated No. 21, it is a fancy magazine.

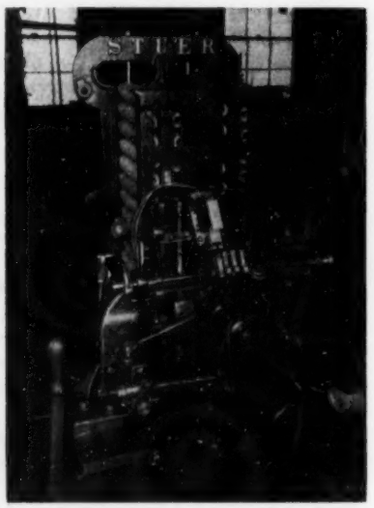
The feeler gives electric indication when a bobbin in any one of the four shuttles is near empty, and sets the magazine parts in transferring position electrically, thus eliminating necessity for a great number of parts. This magazine will weave four different colors of filling. A simple device prevents the magazine from transferring the wrong color bobbin into any one of the four shuttles.

The right hand magazines for right hand looms and left hand magazines for left hand looms are always on the driving side of the loom. Therefore oil from the head-motion cannot drop on the bobbins in the magazine, and the magazine does not interfere with the head-motion. The magazines, being on the driving side of the loom, are

Type 1101 flat bed seaming machine (Willcox & Gibbs).



No. 21 Upright Magazine (Stuer).



always opposite each other, making it more convenient for the weaver to move around the looms.

There is less wear of parts as the magazine moves only during the actual transfer. A special temple cuts while loom lay is on back center, resulting in fewer sidelines and broken picks. The magazine holds a maximum of forty-six woolen bobbins.

Stuer Automatics, 315 East Haverhill St., Lawrence, Mass.

For additional data, request item J-204, using business reply card on page 262.

New Business Machines

A new accounting machine lists 150 lines of information a minute from cards.

A card punch is available in both a non-printing model and a printing model for simultaneous interpretation of the information punched in the cards, and for punching numerical data only or for both numerical and alphabetical information.

The card-programmed electronic calculator is a combination of several units, including three standard IBM machines.

The Cardatype is a new machine that uses pre-punched IBM cards to prepare documents automatically on the IBM electric typewriter.

The electronic statistical machine for the first time combines in one unit the functions of sorting, counting, accumulating, balancing, editing, and printing of statistical information.

The consecutive spacing time recorder is a small flexible machine which may be used as a job cost recorder, an attendance time recorder, or a combination of the two.

International Business Machines Corp., 590 Madison Ave., New York 22, N. Y.

For additional data, request item J-299, using business reply card on page 262. Please specify item.

New Wool Spinning Frame Has Many Improvements

Greater production and lower spinning costs, due to better efficiency and minimized maintenance costs, are claimed for a new wool spinning frame, the Simplex Model F.

The new frame is streamlined throughout and embodies new mechanical and lubricating features. All parts in the head end are removable with a minimum of disturbance to adjacent parts. All change gears and sprockets are located in the head end, with the exception of the roping drum drive, which is located at the foot of the machine.

Safety lock doors are provided on the head end to eliminate the possibility of the machine being started while work is being done within the head.

The complete range of yarn sizes, from the coarsest to the finest, are covered by a selection of only 19 change gears. These gears are all interchangeable from one drive to another.

Motor is mounted on the base of the head end and is fitted with a slow starting clutch of the mercury type. It is said that the gradual start-up given by this clutch practically eliminates end breakage due to harsh starts. This clutch has been pre-lubricated and requires no further attention, according to the manufacturer.

Twister tube and spindle drives are independent of each other and changes may be made at either of these points without disturbance to the other. Both are driven by quadruple roller chains, turning a nest of interchangeable sprockets.

An automatic gear motor rail rewind, located inside of the head, returns the builder to starting position when a set of bobbins is full and ready to be doffed. A tying-in bunch is formed automatically at the start of each set of bobbins.

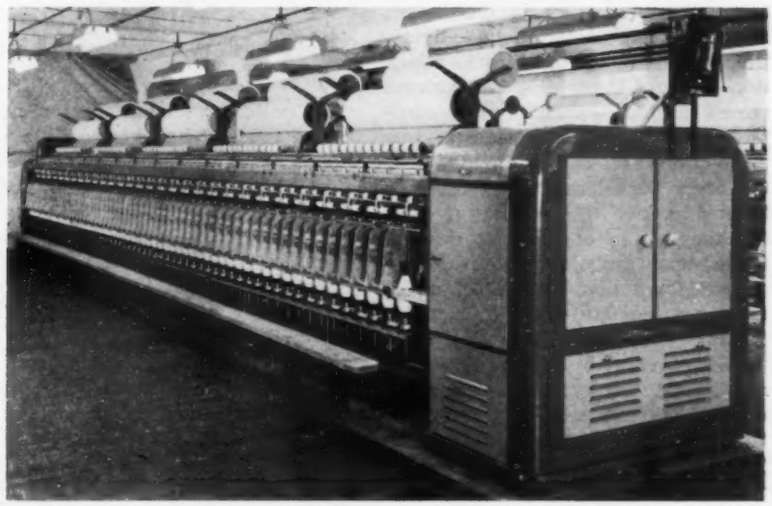
Aluminum alloy roller beams, ring rails and spindle rails are used. Step boards are attached to the sampsons. Spindle rail guide rods and cradle bars are independent of one another. Oilite bearings are used for both the drawing and delivery roll stands and for twister tube. Antifriction bearings are used in spindle and tube cylinders.

Reliable one-shot lubricating systems assure thorough oiling at the head and foot ends of the frame. Twister tubes are traversed 1¼" to distribute the wear on front rolls caused by the abrasive action of yarns traveling at high speeds. Wear of the twister tube bands on the tube cylinder is also distributed, according to the builders.

Top rolls are made with continuous flutes; this allows changing the number of ends per spool without

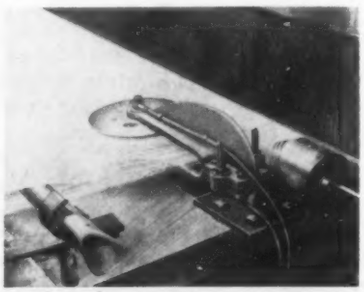
Time recorder (IBM).

Simplex Model F wool spinning frame (Davis & Furber).



ELECTRONIC MOISTURE CONTROL

An increase of 20-30 per cent in production of textile drying machines equipped with the Drimeter, an electronic instrument for continuously measuring exact moisture content, is claimed.

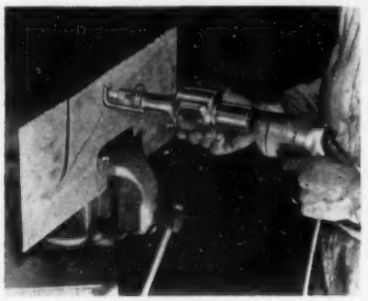


Besides increasing production, accurate moisture control results in better quality of cloth, greater efficiency of machinery and lower fuel consumption, the manufacturer says.

The Drimeter may be installed on any type of fabric dryer or slasher and is designed for use with any fiber or mixture of fibers. Percentage of moisture content is indicated directly on a meter.

Fielden Electronics, Inc., 1171 *New York Ave., Huntington Station, N. Y.*

For additional data, request item J-434, using business reply card on page 262.



PORTABLE SAWING AND FILING ATTACHMENT

Key-Hak is a small, lightweight, portable sawing and filing attachment made to fit any ¼ inch or 5/16 inch air or electric drill or motor driven flexible shaft using either size standard Jacob's chuck.

The attachment has been designed for rough usage in cutting metals of all kinds and thicknesses from light sheet stock to heaviest bar stock and structural steel.

Producers and Distributors, Inc., 4015 *MacArthur Blvd., Oakland* 19, *California.*

For additional data, request item J-427, using business reply card on page 262.

having to replace the rolls.

The foot end contains the roping drum drive and yardage counter.

Davis & Furber Machine Co., North Andover, Mass.

For additional data, request item J-145, using business reply card on page 262.

Color Helm for Preselecting Color Combinations

The professional Color Helm, Model 82, is a precision instrument accurately constructed to guide dyers, finishers, designers, etc., in the selection of colors. Containing 72 spectrum colors for 13,824 possible color combinations, it combines colors in sets of 3—simultaneously arranging all of the other 69 colors in the same relationship. Set the system of keys for the degree of contrast desired, and automatically all colors are arranged for either analagous, alternate, intermediate, triad, or complementary harmony.

There are two complete sets of colors and there are 72 colors in each. The first set consists of the fixed outer border known as "The True Color Circle." The second set consists of the same colors concealed beneath the top shield. Four sets of three colors each are shown in triangular windows, with one further divided in three to show related tints, pures, and darks at the same time.

The instrument is built on a reinforced framed platform which slides in and out of a glass-faced permanent reference cabinet.

Color Helm, Inc., 201 *East Ridgewood Ave., Ridgewood, N. J.*

For additional data, request item J-142, using business reply card on page 262.

The Universal Clamp-Lift

With the Universal Clamp-lift device, palletless handling of a number of types of items is possible with the same machine and device. Also, since the lift is easily demountable, it can be interchanged with standard forks for some handling assignments.

Thus the machine bridges the gap between pallet handling and palletless handling with no need for expensive additional equipment. It eliminates waste of existing pallet stocks when it is not practical to discard them.

The clamp-lift consists of a hydraulically-operated horizontal clamping unit actuated by two opposed cylinders. These cylinders are connected to the existing hydraulic system of the fork-lift truck and are controlled by the operator by means of a valve handle located in a convenient position. Two clamp arms are mounted to extend forward, one attached to each cylinder.

The unit has been designed in such a manner that the basic portions of the device will remain standard for any type of clamping application.

Clark Equipment Co., Industrial Truck Division, Battle Creek, Mich.

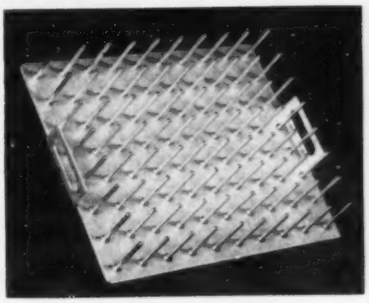
For additional data, request item J-143, using business reply card on page 262.

Recombing Unit for Worsted Tops

To assist manufacturers in obtaining uniform worsted tops for high quality yarn production, a Recombing Unit has been developed by S. A. Officina Meccanica Sant'Andrea Novara, Italian worsted machinery manufacturer.

The smallest combination consists of three or four rectilinear combing machines, Model PN, and one special intersecting gill box, Model SL, with two heads for pre- and post-combing.

The creel of the intersecting gill box is a combination creel equipped



QUILL BOARD FOR ABBOTT WINDER

This new Quill Board was developed for use on the automatic board-loading attachment of the Abbott winder.

It is made with a solid aluminum base and either aluminum or stainless steel pins. A standard size of eighty pins per board with outside dimensions of 12" x 15" to fit the automatic loading device, is available.

Johnson Engineering and Manufacturing Co., Wilkes-Barre, Pa.

For additional data, request item J-423, using business reply card on page 262.

NEW CEILING CLEANER

A new ceiling cleaner (CTC) has been developed for use in conjunction with ParksTurbo CT traveling cleaner (operates on a track on top of spinning frames).

Rotating as it travels, the ceiling cleaner unit directs its current of air upward, preventing lint, dust and fly from settling on lights, piping, ceilings, etc.

Advantages claimed include: ceilings are as clean as frames; lint or dust is practically eliminated; housekeeping is simpler; operatives are happier; yarns are better. Present or future installations of air conditioning (either direct humidification or central station type) are not interfered with.

Parks-Cramer Company, Fitchburg, Mass.

For additional data, request item J-426, using business reply card on page 262.

to take the tops in a ball form for the pre-combing passage and out of cans for post-combing passage.

Ernest L. Frankl Associates, 22 East 40th St., New York 16, N. Y.

For additional data, request item J-457, using business reply card on page 262.

Improved Weft Straightener

The accuracy and sensitivity of a recently improved weft straightener depends on two photocell receivers picking up differences in light reflection from weft threads as they lean towards one or the other receiver under skewed condition.

These scanners were previously mounted in a fixed position on the straightener frame and were set for the maximum width goods to be handled by the straightener. This resulted in less accuracy when narrow goods were processed. Now a manually controlled screw mounting is provided for these receivers so that they may be set in their maximum accuracy position regardless of the width of cloth handled.

The previous control panel, which handles a very small amount of current, had rheostats, balancing switches and meter which were adequate electrically for the job at hand but were much too fine for a textile mill operator to handle satisfactorily. A new and larger meter has been introduced for more accurate readings of photocell output, and the rheostats have been increased in size so that they compare more favorably with the handles which the operator normally controls.

The light source consists of a series of prefocused photoflood lights. Individual switches on the lamps at each end of the housing are now furnished so that the lamps which shine outside of the selvages can be turned off, thus eliminating possible reflection of adjacent equipment not related to the cloth.

Winsor & Jerauld Mfg. Co., 1268 Eddy St., Providence 5, R. I.

For additional data, request item J-219, using business reply card on page 262.

Sight Glass with Valve

The clarity or turbidity of transparent liquids flowing under pressure through pipe lines can now be observed by means of a valve type sight glass.

Differential pressure is established across the deflector to allow some of the liquid to circulate continuously through a glass observation bowl. A special feature is provided by the valve which permits the removal of the observation bowl for cleaning.

Worthington Pump and Machinery Corp., Harrison, N. J.

For additional data, request item J-220, using business reply card on page 262.

Instrument Measures Moisture in Warps and Fabrics

A plate attachment for the KMC Midget Psychrometer (described on page 109, November 1948 issue) permits moisture determinations on cotton and rayon warps and also rolls and bales of fabrics.

Kearney Mfg. Co., Inc., Kearney, N. J.

For additional data, request item J-175, using business reply card on page 262.

Gate Tension Has Wheel Indicator

A precision gate tension No. 57-AF-134, is free from troublesome weights; it operates by spring ten-

PORTABLE ELECTRIC HUMIDITY-TEMPERATURE INDICATOR

A portable electric humidity and temperature indicator has been developed to meet the demand for direct readings of percentage of relative humidity and temperature in degrees Fahrenheit.

The reading dial has two scales. The upper one is calibrated in per cent relative humidity with range of 30% to 80%, the lower scale having a range of 40° to 100° F.

The sensing elements mounted in a screened metal case are fastened to an extension rod for taking direct readings at air duct supply grilles or at any other point in an air conditioning system.

Buensod-Stacey, Inc., 60 East 42nd St., New York, N. Y.

For additional data, request item J-618, using business reply card on page 262.

sion with wheel indicator, making it possible for operator to eliminate guess work and set all units at equal tension.

With easy releasing and locking device, any desired increase or reduction in tension is quickly and accurately made. This tension is well adapted to the full range of drapery, tapestry and upholstery yarns of cotton, silk and rayon. It is also useful in wool and worsted mills and carpet and rug mills.

These tensions are available with either white porcelain or AlSiMag fingers.

F. A. Lazenby & Co., 3106 Elm Ave., Baltimore 11, Md.

For additional data, request item J-180, using business reply card on page 262.

High-Speed Direct Warper

A warper featuring heavy construction and minimum vibration at high operating speeds builds beams up to 36 inches in diameter and 54¼ inches wide. Minimum yarn speed is reported to be 150 or 225 yards per minute with a 4 to 1 upward to a maximum speed of 900 yards per minute.

An a-c—d-c drive is provided. The all-electronic circuit makes operation of the machine easy. Constant, uniform linear warp speed is automatically maintained throughout the entire beam build up. A small potentiometer mounted on the pushbutton station permits ready adjustment of the operating speed over the range outlined above. An electrical tachometer is provided to indicate the operating speed at all times.

Operation of the machine is entirely by pushbutton control.

A low threading and inspection speed is provided by the use of a momentary contact type "jog" pushbutton. This control circuit also responds to the demands of thread break relay of the creel and to a predetermined yardage counter mounted adjacent to the control pushbutton station.

Beam is spindle driven by means of three drive pins in the head. Handling of the beam in and out of the warper is done entirely by a separate hydraulic system, independent of the main drive. The operator, by the manipulation of the control levers, can easily and safely remove and insert beams.

Sipp-Eastwood Corp., Paterson, N. J.

For additional data, request item J-264, using business reply card on page 262.

Improved Stainless Steel Lixator

A new model Lixate rock salt dissolver called the Sterling Model Lixator, is made of durable stainless steel.

One of the major improvements is that it rests on 2-in. pipe legs that are furnished in short lengths so that the unit will be as low as possible to the floor in order to permit easier filling with rock salt. The height of the Lixator may be easily changed to suit rearrangement of other equipment by attaching different lengths of pipe to the couplings at the bottom of the Lixator.

A second improvement eliminates the nozzle at the extreme bottom and introduces two nozzles for flushing water located within the unit to simplify the periodic task of cleaning the interior of the dissolving tank.

International Salt Co., Inc., Scranton, Pa.

For additional data, request item J-603, using business reply card on page 262.

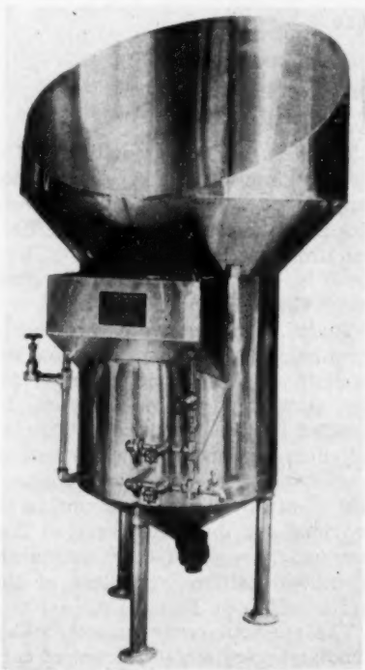
Automatic Winder for Tubes Used in Smallware Looms

The Autoquill Winder is capable of producing uniform packages of a high quality in all types of yarn.

The framework construction gives maximum stability and minimum of vibration under working conditions.

The machine is normally motor driven. The main driving spindle enters a reduction gear box mounted at the driving end which divides the drive into two sections, one of which drives the automatons at a constant speed independent of the winding

Lixator (International).

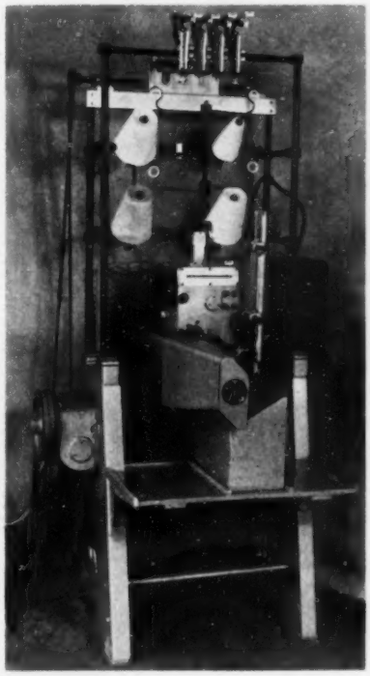


spindle speed, and the second section which drives a line shaft mounted longitudinally in the frame.

The winding heads are of the single spindle type, the spindle being mounted in bearings and driven by a fast and loose pulley arrangement at the rear of the machine where the gainer drive to the cam spindle is also mounted. This is fitted with an expanding pulley for the purpose of adjusting the lay or "Diamond Pattern" of the package, and has a changeable wind pulley, various sizes of which may be fitted, dependent upon the number of "Crossings" required.

The traverse length is adjustable and a visual scale giving a direct reading of traverse length is fitted on the side of the winding head.

The magazine, mounted at the right-hand side of the winding station, holds 40 average size quill tubes, and has ample adjustment to cover a range of tube sizes. A unique feature



Autoquill winder (Muschamp Taylor).

is the positive gripping arrangement at the base, which holds the empty tube securely as it is brought into the winding position at the changeover.

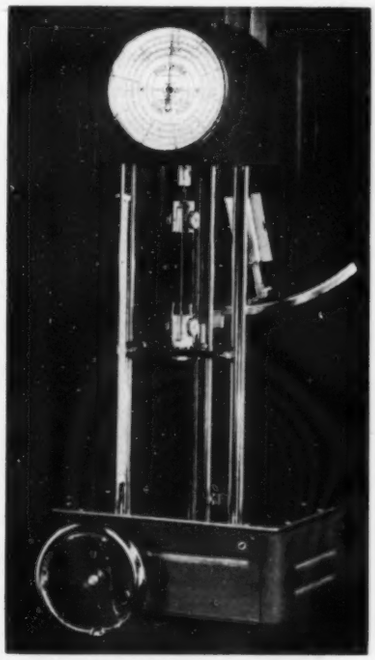
Other versions of this machine are available.

Muschamp Taylor, Ltd., Manchester 4, England.

For additional data, request item J-451, using business reply card on page 262.

Hand Operated, Low Range Universal Testing Machine

A recently developed hand operated, universal testing machine features an accuracy of ½ of 1% and a range of zero to 100 pounds. The instrument handles specimens under tension, compression, transverse, and shear.



Universal tester (Dillon).

Calibrated in tenths of pounds,, ounces, or kilograms, the instrument is supplied with one pair of grips for flat specimens up to ⅛" thick by 1¼" wide. Other grips are available.

Indicator remains at peak load after specimen breaks. Reset is manual.

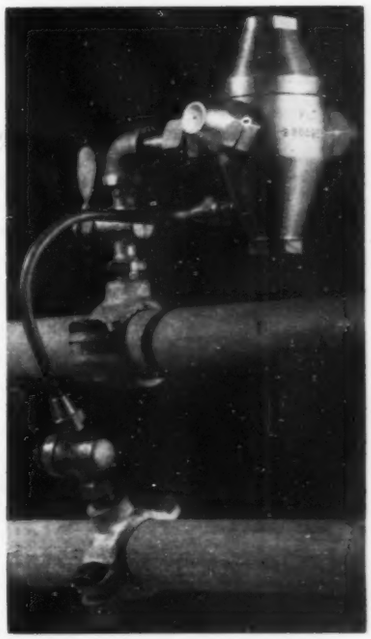
W C. Dillon & Co., Inc., 5410 *W. Harrison St., Chicago* 44, *Ill.*

For additional data, request item J-148, using business reply card on page 262.

Air and Water Pressure Atomizers

A new type air and water pressure atomizer is a small, compact unit designed to prevent clogging, with a substantial reduction in air consumption.

This atomizer will not "wet down"



INACO atomizer (Industrialaire).

nor produce coarse spray, it is claimed. It uses the principle of bringing the water and air streams together under pressure in the chamber of the atomizer, producing the finest spray possible at conventional operating pressures. The INACO atomizer is made with single or double nozzles, ranging in capacity from 8 to 15 pounds per nozzle.

Industrialaire Co., 1600 Hutchison Ave., Charlotte, N. C.

For additional data, request item J-166, using business reply card on page 262.

Immersion Electrode for Detecting pH

A recently developed immersion electrode assembly for detecting pH, plus proper application of pH control principles and equipment, permits close control over a neutralization bath with a relatively simple installation.

Of molded plastic design, the new immersion pH unit operates in the bath continuously without the necessity of pumping or flowing a liquor sample for measurement. Mill personnel can readily take care of the occasional simple maintenance required, it is claimed.

Leeds & Northrup Co., 4934 *Stenton Ave., Philadelphia* 44, *Pa.*

For additional data, request item J-177, using business reply card on page 262.

Cloth Inspection Machine Provides Stationary Image

A recently developed cloth inspection machine permits an operator to view the continuously moving cloth as though it passed before her in a series of stationary panels, permitting easier and more accurate inspection.

Using this machine, the inspector sits before it and views the cloth on a mirror. This mirror is not stationary, but tracks the moving cloth at such a speed that the cloth appears to be stationary. The inspector sees an area of cloth 18 inches long and the full width of the roll.

The mirror then flicks back quickly to view the next panel of cloth going through the machine, this panel being similarly tracked by the mirror to provide a stationary image for the operator.

The machine is provided with variable speed controls so that the stationary images move at a selected speed before the inspector's eyes. The speed of the cloth through the machine may be varied from 20 to 60 yards per minute.

After passing before the mirror, the cloth comes out onto a platform directly in front of the operator. If any imperfections have been noted, the operator may quickly stop the machine by releasing pressure on a foot pedal and may make repairs or examine the imperfections further.

Institute of Textile Technology, Charlottesville, Va.

For additional data, request item J-250, using business reply card on page 262.

Synthetic Size for Slashing Acetate

Development of a water soluble, synthetic resin size for slashing acetate warps has been announced. The new size, Stymer, gives individual yarns a tough, uniform coating, according to the manufacturer.

Flexibility, adhesiveness and abrasion resistance without undue stiffening are the desirable characteristics of the product, which is usually used in the form of a sodium salt of the resin.

The strength imparted by the Stymer coating is said to increase weaving efficiency—the excellent adhesion of the size has reduced shedding; its strength has reduced end breaks; its conductivity has eliminated static electricity problems.

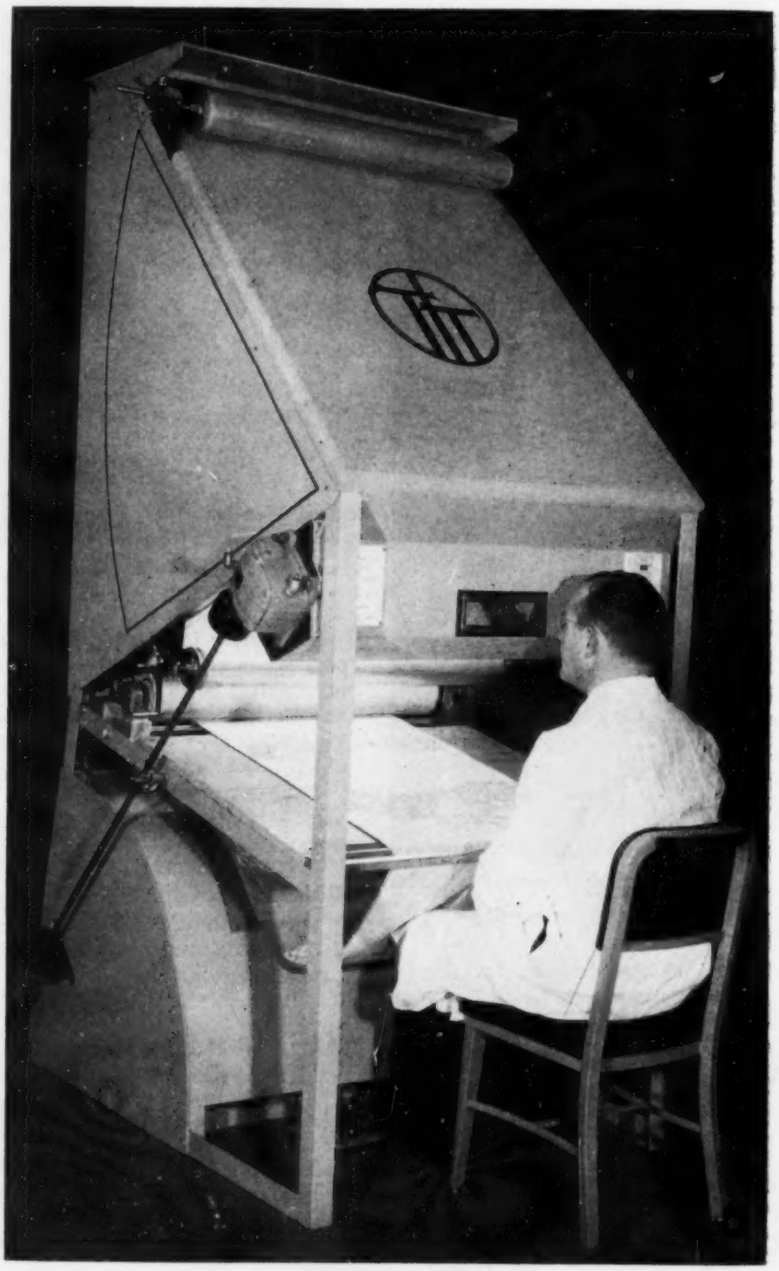
As a sizing for acetate rayon warps, Stymer is said to be twice as effective as other agents, enabling mills to use smaller quantities in this application. The size does not "build up" on the cans; it is easily removed from grey goods; it does not gel when cold.

Satisfactory results have been obtained with solutions of four to six per cent, depending upon local conditions. Stymer is added gradually to water which has been heated to about 170 F, and boiled for approximately thirty minutes under continuous agitation. Sufficient cold water is added to bring the bath up to total volume and to keep the mixture to the initial temperature. Size box temperatures range between 135 and 150 F. It is claimed that sizing time is reduced when using the product and that storage of Stymer-sized warps over long periods of time does not increase scouring difficulties.

Monsanto Chemical Co., Merrimac Division, Everett, Mass.

For additional data, request item J-185, using business reply card on page 262.

Cloth inspection machine (Institute of Textile Technology).



Revolving Waste Carousel Has 24 Bins for Waste

A waste carousel recently developed is 30 ft in diameter, 10 ft high and revolves on a central axis. The various waste types are stored in 24 separate bins in the carousel. Each bin holds enough waste to make one 500-lb. bale.

Storage capacity of carousel is 10 tons; floor space occupied is 700 sq. ft. Each type of waste is received at the waste house in one of two vacuum tanks. When the waste delivery is complete, a bin of the carousel designated to held that type of waste is brought beneath the tank. "Merry-go-round" action of the carousel is push-button controlled. Waste then drops from the tanks into the bin for storage.

When bins are filled, the carousel is turned until doors in the side are near and above the pit of a baling press. Waste slides through the side door into the baling press where it is baled and stored in the waste house storage area.

The carousel is equipped with a 5 hp motor which drives the gear reduction box.

P. O. M. Co. and Werner Textile Consultants, 60 East 42nd St., New York 17, N. Y.

For additional data, request item J-193, using business reply card on page 262.

Bradford Type Spinner Has Rising Draft Field

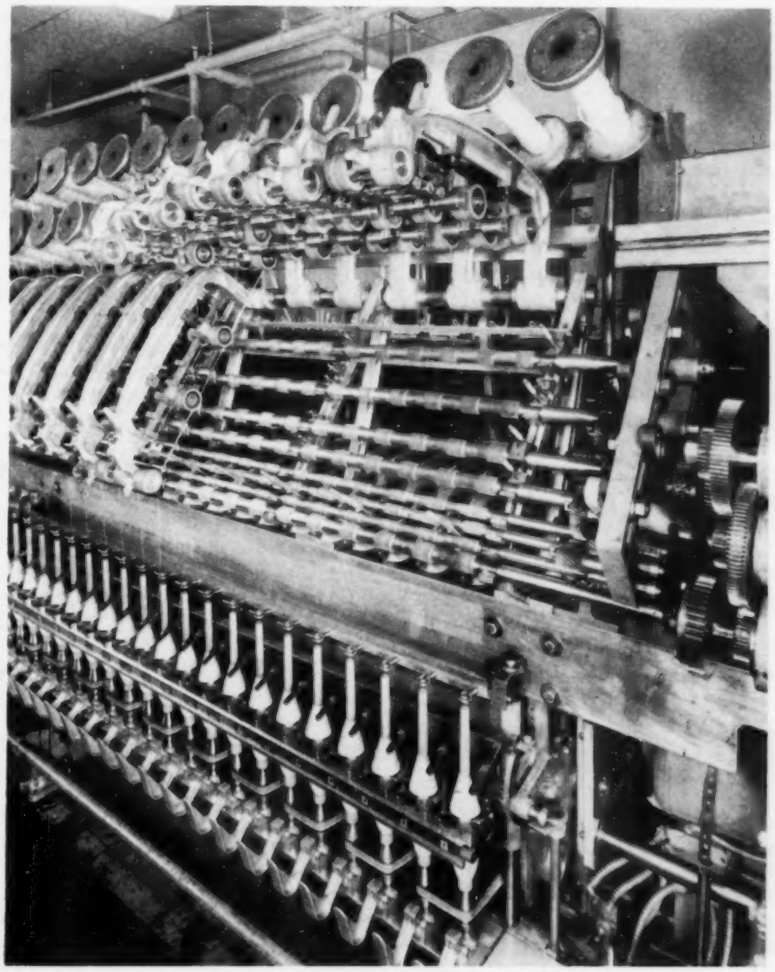
A McGlynn Hays Bradford type spinning machine, now in production, incorporates all of the features of the French type machine manufactured by this firm (see page 79 of the May 1948 issue of TEXTILE INDUSTRIES for complete description).

It differs only with respect to the design of the draft field and creel. To obtain higher drafts of twisted sliver, a two-stage field has been developed providing normal drafts between 15 and 20 and in some cases as high as 30.

McGlynn Hays Industries, Inc., Belleville, N. J.

For additional data, request item J-401, using business reply card on page 262.

Bradford type spinning machine (McGlynn Hays).



V-Belt Loom Drive Has Many Features

Smoother loom operation, positive power strokes, less loom maintenance, compactness, dependability and better cloth due to the reduction of warp and filling breaks brought about by its shock absorbent characteristics, are advantages claimed for a new V-belt loom drive.

The three available motor locations (loom side, end frame, or top mounting) eliminate the necessity for rearranging a weave room when converting looms to individual drives since no part of the drive extends beyond the loom in any direction far enough to cause any inconvenience.

The loom side mounting is satisfactory for all applications except double warp work, whereas the end frame and top mountings are suitable for all types of work.

The drive includes a clutch particularly designed for this application. Its features are quick release and ease of engagement. Adjustment of this clutch is made by turning one knurled nut. Replacement of the clutch lining is simple—when the clutch is disengaged the lining may be replaced simply by removing eight cap screws. The lining is split and can then be removed without further disassembly of the clutch. Standard shifter mechanism operates the clutch.

According to the manufacturer, higher loom speeds are possible due to the shock absorbent characteristics of this drive, without increased maintenance and without sacrifice in cloth quality.

The V-belts are constructed to allow flexing around small pulleys as well as to give horsepower to cover requirements of the drive. They are oil and heat resistant and have been built to necessitate a minimum of take-up. A belt life of at least two years is contemplated.

Owen-Richards Co., Inc., Birmingham 4, Ala.

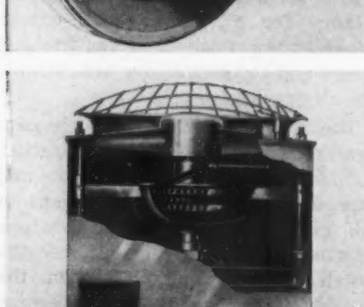
For additional data, request item J-191, using business reply card on page 262.

Above, new pillow block (Split Ballbearing).

Below, Vari-Speed Jr. (Reeves).

Above, turbine-driven revolving heater (Wing).

Below, dye jig with new drive unit (Van Vlaanderen).



New Pillow Block Design Cuts Bearing Replacement Time

A new design for pillow blocks has been announced. The housing and outer race are forged integral from bearing steel. Both the inner and the outer races are split or fractured and repositioned by holding screws.

This construction permits the assembly of the bearing in places where a solid race bearing cannot be installed. As a replacement bearing, it can be assembled without stripping the shaft or dismantling attached mechanism.

Split Ballbearing Corp., Lebanon, N. H.

For additional data, request item J-205, using business reply card on page 262.

Variable Speed Control Unit for Light HP Machines

The Vari-Speed Jr., a variable speed control unit, provides longer belt life and improved lubrication.

Offered as a means of providing accurate and dependable variable speed control for small and light machinery, such as grinders, buffers, saws, blowers, ovens, etc., without stopping the machine, the Vari-Speed Jr. is a unit assembly comprising a self-adjusting V-type pulley which may be mounted on the shaft of the constant speed motor, and connected with V-belt to driven machine.

As the motor is moved back, on a sliding or pivoting base, the V-belt rides on a smaller diameter in the expanding pulley and the speed delivered to the machine is decreased. As the motor is moved forward the pulley contracts under spring tension, the belt rides at a greater diameter, and speed is increased.

The unit is made in six sizes for use with any standard constant speed motor up to 1½ hp, and any "A" or "B" V-belt. It delivers variable speed to the driven machine between the range of 1¾ to 2¾ : 1.

Reeves Pulley Co., Columbus, Ind.

For additional data, request item J-196, using business reply card on page 262.

Turbine-Driven Revolving Heater

A turbine-driven revolving heater uses the same steam to drive its fan as is used to supply heat. The fan is operated by a steam turbine, and exhaust steam from the turbine is piped into the heater section. The steam thus condensed in heating the air has first been used to operate the fan turbine.

In operation, the revolving discharge outlets on the heater turn slowly through a complete circle, projecting a constantly moving stream of heated air over the entire working area.

L. J. Wing Mfg. Co., 154 West 14th St., New York, N. Y

For additional data, request item J-228, using business reply card on page 262.

Dye Jig Maintains Proper Tension

A dye jig with a new drive unit and other features which the company states will be advantageous in dyeing nylon and other modern fabrics has been developed.

The jig maintains the desired tension by the use of a worm-gear drive immersed in oil and separated by a partition from the dual friction clutch which operates dry. This new drive, plus anti-friction bearings, greatly reduces drag when idling.

Other improvements are: totally enclosed sprockets and chains, sealed in oil for longer service and cleaner operating conditions; new overflow arrangement at sides to keep scum from fabric; quick replacement of main drive unit with a spare unit when necessary with the minimum loss of production.

Van Vlaanderen Machine Co., 370 Straight St., Paterson, N. J.

For additional data, request item J-218, using business reply card on page 262.

Color Matching Instrument More Accurate than Eye

A color matching instrument accurate to within one-half of one per cent, has been developed in the research laboratories of the Pittsburgh Plate Glass Co.

Known as the PPG-IDL Color Eye, the instrument photo-electrically records the response, sensitivity, and discrimination characteristics of the human eye. With greater accuracy than the eye it measures color differences and divides by the total reflected light to give comparisons in terms of percentage reflectance difference, regardless of illumination level or color density, it is claimed.

Color differences are read directly

on a meter having two ranges. Approximate luminosity is read directly on a logarithmic scale from 0.1% to 100%. Accurate luminosity or tristimulus values may be obtained by a direct reading micrometer-controlled optical slit comparing the sample to a white standard.

The Color Eye is substantially unaffected by illumination level and stray light. Color comparison is made on a basis of luminosity and direct tristimulus measurements. Colors thus matched are industrially satisfactory regardless of the detailed spectrophotometric color curve of the samples.

Instrument Development Laboratories, Inc., Williston Park, Long Island, N. Y.

For additional data, request item J-169, using business reply card on page 262.

Heavy Duty Cone for Synthetic Yarns

The 3-51 cone is used primarily to increase the package size in winding synthetic yarns. It is a heavy duty cone with a straight or crimped nose and can be furnished in either low mark or smooth surface paper. It can also be supplied with burnished nose and polished base, with Unitex or velvet surfaces and with colored lacquered tips.

The cone is used principally on Universal No. 50 winders with pineapple attachments and on Foster No. 75 winders.

Sonoco Products Co., Hartsville, S. C.

For additional data, request item J-207, using business reply card on page 262.

New Brushes for Textile Machinery

A pile raising brush has been developed for use on shearing machines in rug mills. Continuous metal-back brush strips are mounted parallel and longitudinally on a metal core. This construction brings two to three times more brush material in contact with the carpeting, according to the manufacturer.

The extra brush material is said to increase brush life, which is further extended by the use of nylon filaments. Replacement of strips is accomplished without removal of core from journals; only the brush strip is renewed.

A nap laying brush developed for rug mills to lay nap after the steaming operation, measures 223 inches overall.

The core is a seamless tube with 5-inch OD, 7/16" wall and 204½" length. This core is reported to be concentric its full length, with shaft extensions within .025 inch total indicator reading. To this core metal-back brush strips are attached longitudinally. Black nylon was selected as the brush material because it will retain its resiliency in steamy atmosphere, will lay the rug nap smoothly, and give long wear.

A wool carding brush that takes the place of card clothing is precision-built to machine tolerances. The diameter is held to .005 inches, and this brush is concentric for its entire 62-inch length.

A cotton shearing machine brush is designed to raise ends of thread so they may be cut off by the blade of a shear. Metal-back brush strips are mounted longitudinally on brush roll. Considerable space is provided between these brush strips. As the brush revolves, and the brush material raises threads, a draft of air is set in motion by the brush strips. This draft keeps the ends of threads lifted until the fabric has passed under the shear suction head. The use of strips provides satisfactory draft, it is claimed, because the strips are continuous.

Fuller Brush Co., 3594 Main St., Hartford, Conn.

For additional data, request item J-154, using business reply card on page 262. Please specify item.

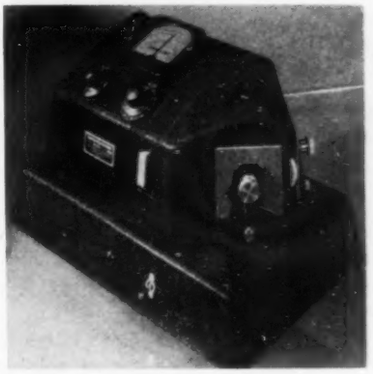
Steam Generator Has Improved Operating Features

A new steam generator emphasizes improvements in basic operating features. A high atomizing burner nozzle incorporating a primary air supply assures precise injection of fuel and air for efficient combusion at all firing rates. In addition, the new nozzle design permits interchangeable oil or gas firing without requiring a change of nozzle.

The new model also includes a simplified air supply system, improved combustion and ignition programming controls, and a blower-air channel design that achieves quiet operation. The steam generator is available in sizes ranging from 10 to 300 horsepower, and in pressures from 15 to 200 lbs.

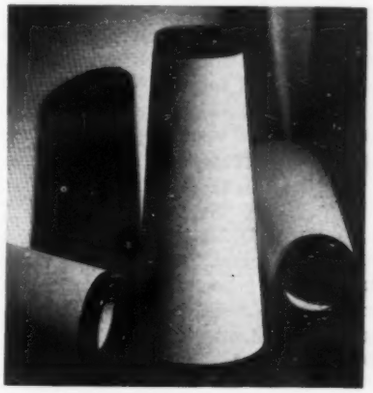
Cyclotherm Corporation, 90 Broad Street, New York 4, N. Y.

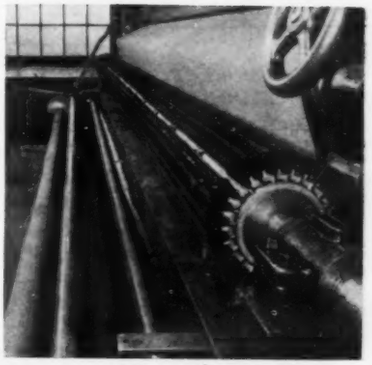
For additional data, request item J-133, using business reply card on page 262.



Above, the Color Eye (IDL).

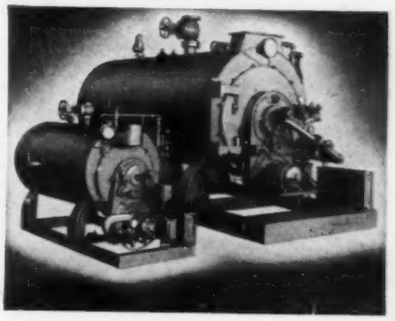
Below, the 3-51 cone for synthetic yarns (Sonoco).





Above, pile raising brush (Fuller).

Below, steam generator (Cyclotherm).



Onyx Developments

The following compounds for the processing of textile goods have been announced during the past year by the Onyx Oil & Chemical Company.

Fiba-Weld N is an improved slip-proofing preparation for application to all types of textiles.

Dullatone DB is a duller especially recommended for application to dark shades of acetate and rayon.

Xyno Resin R is a clear, slightly viscous solution of a water soluble resin recommended as a ribbon finish to impart body and stiffness to silks and acetates.

Xyno Resin 497 is a clear viscous solution of a water soluble ammonium salt of a thermoplastic resin recommended as a stiffening agent for synthetic fabrics.

Xyno Resin 497 S is a clear viscous solution of a water soluble sodium salt of a thermoplastic resin suggested as a textile stiffener and adhesive.

Neufume DMH is a paste which is readily dispersible in warm water and which is recommended for use in the dye bath for application to acetate fabrics to inhibit atmospheric gas fading.

Eternalure is a water dispersed resin emulsion especially developed for finishing nylon hosiery. It imparts snag resistance and body, clarifies and tightens the stitch and provides dulling.

Onyxol 9162 is a fatty acid alkanolamine condensate possessing excellent wetting, foaming and detergent characteristics. It is particularly recommended for wool scouring.

Neutronyx 600 is a non-ionic surface active agent exhibiting superior foaming and detergent characteristics. It is applicable in both acid and alkaline media and in hard water.

Onyx Oil & Chemical Co., Warren and Morris Sts., Jersey City 2, N. J.

For additional data, request item J-192, using business reply card on page 262. Please specify item.

Desizing Agent

Exsize-T is a desizing agent manufactured specifically for the textile trade. It is a liquid enzyme concentrate and mixes readily with water, producing a uniform desizing solution. It has a neutral pH and is harmless to animal or vegetable fiber.

The product is reported to have excellent stability. Stored with reasonable care at cool temperatures, it can be kept indefinitely without loss of its starch digesting power. Storage for prolonged periods at temperatures of 100 to 110 F is not advisable, although even at these unusual storage temperatures the reduction in potency is slow.

Due to its high heat resistance there is little or no destruction of activity during the desizing process. The enzyme remains active until all of the starch present has been digested.

Pabst Sales Co., 221 N. LaSalle St., Chicago 1, Ill.

For additional data, request item J-195, using business reply card on page 262.

Metallic Top Spindles for Paper Tubes

The "Alumi-Sheath" spindle is a new metallic top spindle for paper tubes. According to the manufacturer, it runs unusually smooth and has exceptional stability.

The new spindle consists of a short, heat-treated steel blade with a special enlarged top, an aluminum sheath bored at the bottom end to be a press fit onto the top of the steel blade, and a chromium plated steel whorl that is press fitted over the bottom end of the aluminum sheath.

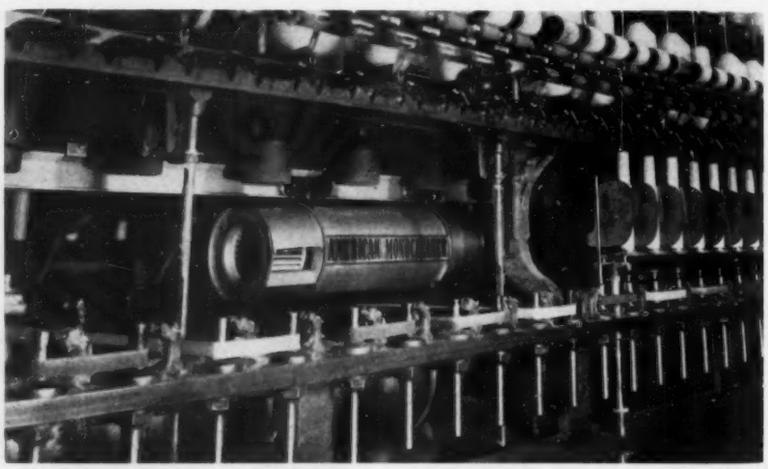
Of special interest is the fact that

UNDERFRAME CLEANER PREVENTS LINT ACCUMULATION

A device designed for location underneath the greenboard or deck and immediately above the cylinder on spinning frames prevents the accumulation of lint and "streamers" under the frame.

The equipment, termed the underframe cleaner, travels on a single electrified track from one end of the spinning frame to the other, delivering a stream of air which blows the lint from under the frame and onto the floor of the alley, where it collects in rolls or balls to be swept up easily by the sweeper.

The cleaner unit is cylindrical in shape, some three feet in length, and only six inches in overall diameter.



It delivers two high velocity, rotating and traveling streams or jets of air (one on each end of the unit) obtained from an electric motor-driven unit suspended from and running back and forth on a rail extending the entire length of the spinning frame. The rail is attached to the main frames directly over the spinning frame cylinder.

Electric power is obtained from the main frame drive motor junction box by means of an isolating transformer.

The entire unit is designed to operate without lubrication and a minimum of maintenance.

The American MonoRail Co., 13106 Athens Ave., Cleveland 7, Ohio.

For additional data, request item J-432, using business reply card on page 262.

the spindle may be used in conventional bolsters and cases, whether of plain or anti-friction bearing design; also, the spindle is adaptable to the new wood tubes.

Whitin Machine Works, Whitinsville, Mass.

For additional data, request item J-225, using business reply card on page 262.

Laminated Hickory Picker Stick

A laminated hickory picker stick designated particularly for use on all types of Draper and C & K high speed looms where loop pickers are used, is now in production. Known as Pickrite brand, the sticks are no heavier than the conventional hickory picker stick. They are precision made and guaranteed against warping and delaminating.

Tatem Manufacturing Co., Eastford, Conn.

For additional data, request item J-216, using business reply card on page 262.

Rotating Type Adjustable Speed Drive

The new Type AV drive consists of a motor generator set, d-c motor, exciters for the d-c motor and d-c generator, and both a-c and d-c control for the d-c motor and MG set.

The important improvements in this drive are: elimination of rotating exciter; complete drive is packaged in one unit; the use of functional control sub-assemblies; speed adjuster mounted in control station; regenerative braking for both speed change and stopping is standard.

Textile industry applications include: warpers and beamers, slashers, full-fashioned hosiery machines; finishing machines, etc.

Westinghouse Electric Corp., Box 868, Pittsburgh 30, Pa.

For additional data, request item J-224, using business reply card on page 262.

Top Suction Pump for Volatile Dye Liquors

A new Top Suction Pump of vertical design for outside mounting is said to be especially well adapted for pumping volatile liquids such as hot volatile dye liquors.

According to the manufacturer, it is impossible for the pump to become vapor or air bound. The packing box can be kept sealed readily, even under extremely high vacuum, by filling the space around the packing box with water or other sealing liquid.

Lawrence Machine & Pump Corp., 371 Market St., Lawrence, Mass.

For additional data, request item J-179, using business reply card on page 262.

Finishing Chemicals by Seydel-Woolley

Three of the most widely used groups of finishing chemicals placed on the market this year by this textile chemical manufacturer are described as follows:

A complete line of Sanforizing assistants has been introduced under the trade-name of "Seycol." Seycol S is the standard rewetting and softening agent for general use.

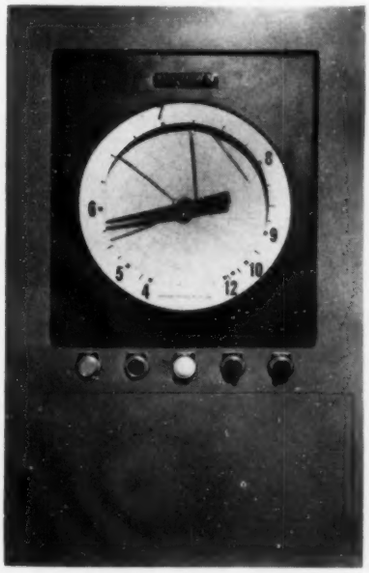
New detergents including high concentration liquid and powder forms with and without builders of the alkylarylsulfonate type, absolutely stable to dilute acid and alkali solutions and bleaching baths, have been added to the "Seycoterge" line.

Seycopen 49 is a new, fast penetrant giving excellent wetting in low concentrations. It is an alkylarylsulfonate type surface active agent

NEW PROCESS CONTROL INSTRUMENTS

ELECTRONIC MOIST-O-GRAPH

The new ElectroniK Moist-O-Graph, which employs the ElectroniK recorder as the measuring instrument, is available in two different styles for textile applications. One of these, featuring electric control, is a cubicle 35 inches high, 22 inches wide, and 12 inches deep adapted for either pedestal or wall mounting .



The other style, featuring air control, is a unitary panel in which the Moist-O-Graph recorder occupies the top position. Below is a dryer temperature controller and at the bottom is the Moist-O-Graph transmitter. The panel is 64 inches high.

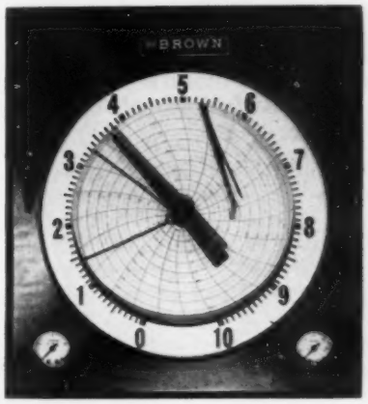
The new instrument is considerably more flexible and occupies less space than the older model.

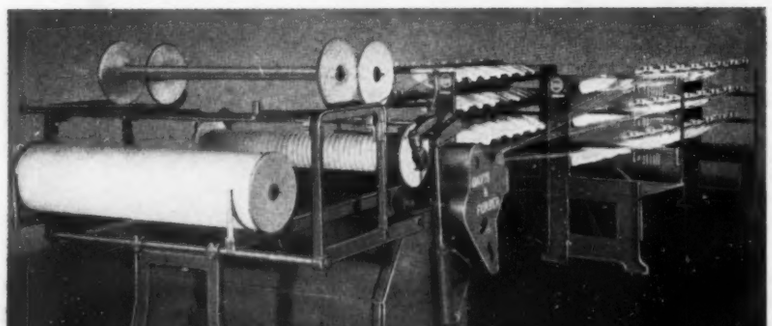
STRETCH RECORDER-CONTROLLER

Highly accurate measurement of stretch in textile materials during processing is now possible with a new Stretch Recorder. The instrument is calibrated directly in per cent of stretch and may be furnished in spans of 0 to 5%, 0 to 10%, or in larger spans if required. Accuracy is said to be better than one per cent of scale span for all scales.

Brown Instruments Division, Minneapolis-Honeywell Regulator Co., Wayne and Roberts Aves., Philadelphia 44, Pa.

For additional data, request item J-419, using business reply card page 262. Please specify item.





The Model 60 electro-pneumatic warp spooler (Davis & Furber).

Ball bearing comb box (McDonough).

stable to dilute acid and alkali and bleaching baths.

Seydel-Woolley & Co., Finishing Chemicals Division, 748 Rice St., N.W., Atlanta, Ga.

For additional data, request item J-203, using business reply card on page 262. Please specify item.

Lap-Resistant Cots

Lap-resistant synthetic rubber roll covers or cots have been placed on the market.

Electrolytes are incorporated into the synthetic rubbers from which roll covers are made. The electrolytes, according to the manufacturer, supply the necessary electric charges to reduce the electrokinetic potential between the cot surface and the film of water on the fibers being processed to zero or substantially zero, which, it is believed, destroys the adhesion between the cot and the water film and thus prevents lapping.

Armstrong Cork Co., Lancaster, Pa.

For additional data, request item J-106, using business reply card on page 262.

Electro-Pneumatic Warp Spooler for Woolen Yarns

Designated the Model 60, a new warp spooler is designed to operate at high speeds.

According to the announcement, up to 40 per cent more yarn of certain types can be wound on spools due to the pneumatic compression feature.

A magazine creel is provided with one half of the ends on each of the two sections. Each section of the creel contains 48 large packages of yarn, 24 of which are live ends. The remaining 24 ends are reserve packages tied in tandem to the tails of the live ends. The operative ties in the reserve packages while the live ends are being run off, thereby allowing continuous operation.

A driven measuring roll is designed to pull an equal yardage of yarn from each bobbin and to give positive yarn tension to the spool. Spools are cross-wound by a cam-driven builder set to build a flat cheese.

A semi-automatic spool rack is provided to reduce the labor required in operating the machine. The speed of the spooler ranges from 275 to 550 yards per minute. Electronic stop motions are built into the machine to stop it in case of end breakage.

Davis & Furber Machine Company, North Andover, Mass.

For additional data, request item J-243, using business reply card on page 262.

New Ball Bearing Comb Box

A new ball bearing comb box, known as the Pittman wobble-type box, has been announced.

This unit can be operated either right or left hand on any make of card and runs in either direction. Its floating motion eliminates shock, making ball bearing application satisfactory.

The box runs completely dry. Two small bearings on the crank should be lubricated every three or four months.

Advantages claimed for the box include clean operation and reduction in maintenance costs due to savings in lubricant costs.

McDonough Foundry & Machine Co., McDonough, Georgia.

For additional data, request item J-454, using business reply card on page 262.

Fixing Compound for Direct Dyes

A substantive compound to fix direct dyes has been placed on the market. The product is named Ahcofix C.

Chief advantage claimed for Ahcofix C is that when it is added directly to urea-formaldehyde or melamine-formaldehyde resin baths, viscose rayons and cottons achieve washfast properties comparable to vat dyed finishes.

Available in liquid form for instant solubility, Ahcofix C contains no copper salts. According to the manufacturer, this is desirable because complete shade control becomes possible; the necessary copper salts are added in the exact quantities required.

Arnold, Hoffman & Co., Inc., 55 Canal St., Providence, R. I.

For additional data, request item J-101, using business reply card on page 262.

Drum Sander Uses Standard Strip Abrasives

The "Cone-Loc Drum Sander" permits use of less expensive standard strip abrasives. It is a split drum, cushioned with rubber, the halves of the drum being locked into a solid drum by a cone type washer. Its light weight makes the device adaptable for use with a flexible shaft as well as on a stationary arbor.

Standard width abrasives, available in roll form, are wrapped around the drum and secured into place by pins that recede out of the way when the cone washer is tightened down. During buffing, polishing or grinding operations the wheel does not lose diameter and require dressing, according to the manufacturer.

Abrasive cloth in various grits can be quickly interchanged on the same drum to accommodate rough or fine work. The sander is available in sizes from 6¼" to 12" diameter and various standard widths and bores.

American Diamond Saw Co., 519 N. W. Park Avenue, Portland 9, Oregon.

For additional data, request item J-104, using business reply card on page 262.

Electronic Adjustable Speed Drive

Mot-O-Trol packaged adjustable speed drive, employing electronic precision to provide a wide, stepless range of speed control for d-c motors from a-c sources, has been announced. It starts motors, brings them up to a pre-set speed smoothly and rapidly, permits change of speed at any time, applies dynamic braking for stopping, and reverses motors, according to the manufacturer.

A feature of the drive is the sub-assembly construction of the unit. Complete sub-assemblies can be removed for easy maintenance.

A single dial gives finger-tip control of the motor throughout its entire speed range. Speed may be preset before the motor is started, or it may be changed after the motor has come up to speed. Once speed is set, Mot-O-Trol drive automatically maintains close speed regulation to full speed.

Improved IR drop compensation provides a nearly flat speed-torque characteristic over the entire speed range of the drive. This compensating circuit is controlled by feedback from the armature current.

Westinghouse Electric Corp., Box 868, Pittsburgh 30, Pa.

For additional data, request item J-604, using business reply card on page 262.

Ballooning Head Assembly

A new ballooning head assembly permits satisfactory over-end take-off from double headed twister spools. It is particularly suited to the handling of light plied cotton yarn, twisted paper, asbestos or other fibers that will not readily permit unwinding and revolving of the spool.

It is useful when backwinding to cops, butts and bobbins, paper tubes and cones.

F. A. Lazenby & Co., 3106 Elm Ave., Baltimore 11, Md.

For additional data, request item J-182, using business reply card on page 262.

New Padder Features Interchangeable Rolls

A newly designed line of padders, known as "Bullet" padders, has been announced.

Interchangeability of rolls, depending on the type of operation desired, is one of the outstanding features of these two-roll and three-roll padders. In making a conversion, only rolls have to be changed; basic parts of the padders remain the same.

A horizontal rope saturator and a rope squeezer for continuous bleaching have also been developed by this manufacturer.

The principal parts are interchangeable, making the machines more flexible.

H. W. Butterworth & Sons Co., 2417 East York St., Philadelphia 25, Pa.

For additional data, request item J-237, using business reply card on page 262.

Emulsion-Type Detergent Reduces Machinery Clean-Up Costs

An emulsion-type detergent, Oakite Composition No. 99, makes possible substantial economies in the cleaning of textile mill machinery, according to the manufacturer.

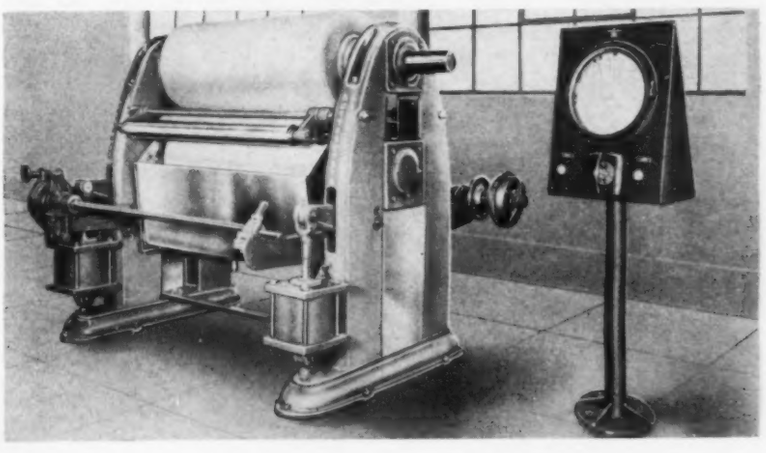
The product is a liquid material that readily forms an emulsion with water. Used in varying dilutions, depending on the nature and extent of the soils to be removed, this emulsion-type detergent provides rapid, thorough removal of dirt, oil, grease and lint from looms, spinning frames, winding and twisting machines, etc.

The solution may be applied to equipment by spraying, brushing or wipe-on methods. It is allowed to "soak" briefly on surfaces to soften and penetrate deposits and then is blown off with compressed air or removed by hand wiping.

Benefits claimed include: (1) reduces detergent costs; (2) does not

Electronic drive (Westinghouse).

The "Bullet" padder (Butterworth).



leave equipment tacky or sticky; (3) does not attack or streak painted surfaces; (4) is non-flammable in undiluted form, non-combustible when diluted with water; (5) does not rust metal surfaces; and (6) is easy on the hands, pleasant to use.

Oakite Products, Inc., 126C *Thames St., New York* 6, *N. Y.*

For additional data, request item J-190, using business reply card on page 262.

Metallic Drawing Roll Features Hardness

A recent development in the processing machinery field is the RGM metallic drawing roll.

According to the manufacturer, the flutes and collars of this roll are so hard that a file will not cut them. In addition, it is said that no tool marks can be found on the flutes as a result of the precision with which they are made.

Gossett Machine Works, Inc., Gastonia, N. C.

For additional data, request item J-161, using business reply card on page 262.

Picker Stick Check Uses No Strap

A picker stick check motion that completely eliminates check straps on regular looms and modernizes the checking movement on gingham box looms, is now in production.

The device is described as a protection to looms against serious slam-off damage. It affords more accurate boxing of the shuttle, eliminates shuttle bounce and helps prevent breakouts, according to the manufacturer.

The life of the shuttle, shuttle box, picker stick and picker is reported increased on looms equipped with the device.

Precision Research Corp., Charlotte, N. C.

For additional data, request item J-402, using business reply card on page 262.

Continuous Preparing and Bleaching Unit

The Hinnekens Continuous Preparing and Bleaching Unit combines the processes of desizing, bleaching, scouring ready for dyeing, and/or including dyeing white, or causticizing, bleaching, scouring and dyeing white for printing ground into one continuous operation, allowing control of the reaction of the chemicals employed, and reducing the actual reaction to approximately 30 to 40 seconds.

The operation of the unit requires only two or three men. Production of the unit is reported as up to 40,000 yards per 8 hours, depending on the weight of the fabric treated. Fabrics processed on the unit show an increased affinity for both dye and print colors, it is claimed.

The machine is approximately 65′ 4″ long, with curing unit 28′ 8″ high. The balance of the machine is 3′ high and 8′ wide and can take care of fabrics up to 66″ in grey width.

Hinnekens Machine Co., Godwin Ave., Paterson, N. J.

For additional data, request item J-163, using business reply card on page 262.

New Lighting Fixture Eliminates Lamp Glare

The Turreter "Series 5" is a closed-end, heavy duty industrial lighting fixture with porcelain-enamel reflectors. It is designed for two or three 48″ 40-watt fluorescent lamps, as well as two 96″ T-12 or T-8 Slimline lamps. All surfaces slope downward to facilitate the shedding of moisture, lint, etc. The reflectors afford successful shielding from lamp glare.

The FasLoc reflector fasteners provide for simple maintenance and cleaning of the fixtures. Suspension may be through any of the conventional means, including the Adjusta hanger (which grips the unit without screws or bolts).

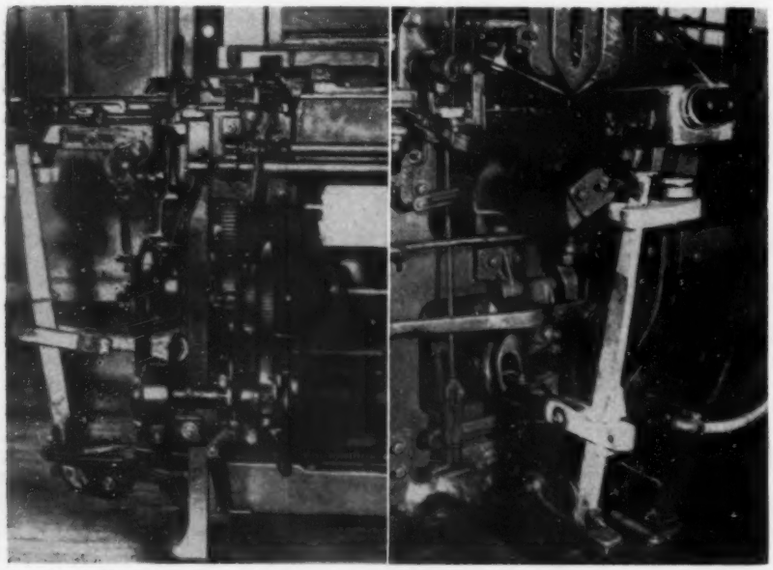
Smithcraft Lighting Division, A. L. Smith Iron Co., Chelsea 50, *Mass.*

For additional data, request item J-211, using business reply card on page 262.

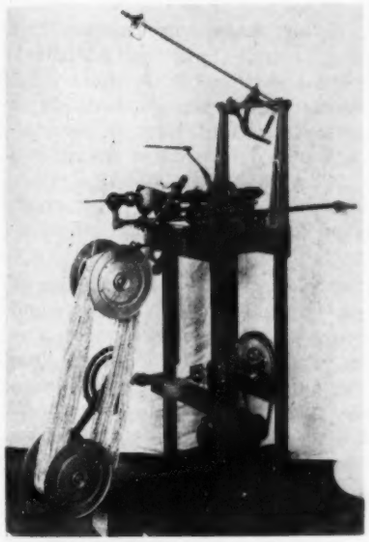
Piece-End Sewing Machine

The Type "J" Piece-End Sewing Machine will sew wet or dry fabrics up to a combined thickness of ⅜″. Three lengths of chain stitch are pro-

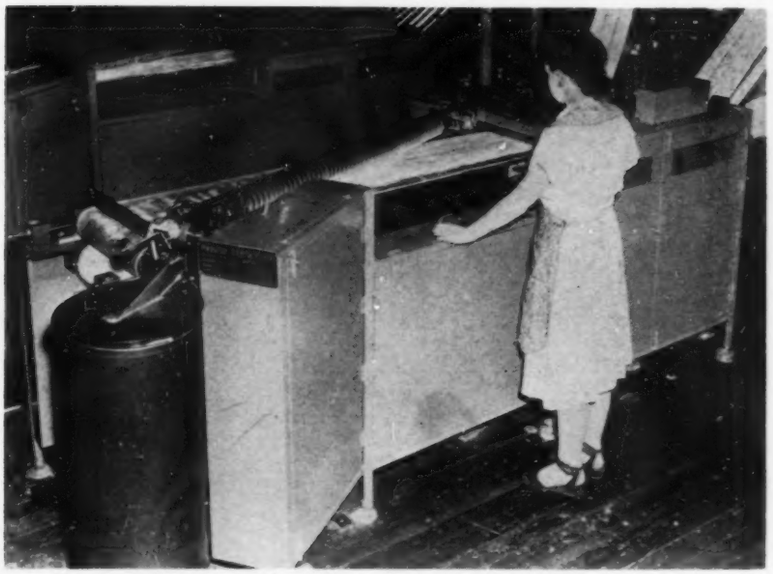
Picker stick check motion (Precision).



Piece-end sewing machine (Trumeter).



Single spindle cop winder (Lazenby).



The Pacific Converter (Warner & Swasey).

vided: 3/16", ⅜" and ⅝" long. The length of the stitch can be altered with a small finger lever without the use of keys or spanners.

The cloth feed is positive by means of a rotary feed wheel fitted with pins, and this ring can be rotated forward to bring the cloth to the needle without turning the handle.

There is clear working space under the top arm, free from any working parts. The cloth is removed from the pins, gradually but positively, with long stainless steel strippers.

Trumeter Co., 1265 Broadway, New York 1, N. Y.

For additional data, request item J-286, using business reply card on page 262.

Single Spindle Cop Winder

To meet the demand for a small power-driven cop winder, the Single Spindle Model AWL was developed. Equipped with 1/3 hp single phase motor, it is adapted to wind cops up to 2¾" diameter by 14" long of heavy rug filler.

The machine is provided with a pair of aluminum barrel runners for the handling of skeins, adjustable to take skeins from 24" to 72". In operation with the top tension equalizer, this combination winds perfect cops direct from skeins without snags or breakage.

F. A. Lazenby & Co., 3106 Elm Ave., Baltimore 11, Md.

For additional data, request item J-181, using business reply card on page 262.

The Pacific Converter

The Pacific Converter is used in conjunction with Pin Drafters in Bradford, Continental, or modified American systems. It is capable of cutting, blending, and drafting a diverse combination of synthetic and natural fibers in any ratio up to 100 per cent pure of each while in top or tow form. Mechanical limitations impose a 6½-inch staple length restriction on stock fed to the converter.

The converter consists of four major assemblies: (1) cutter or stapler; (2) drafting section; (3) accumulator; and (4) crimper and can coiler.

The cutter is, essentially, a helical rotating blade working against a solid anvil. The ratio between speed of stock passage and revolutions of the blade against the anvil determines the distance separating cuts on filament yarn.

The cutter can also be used to break staple fibers to a reduced length. From 100 to 180 pounds per hour of feeding weight can be chopped. Total capacity of the cutter in denier is 2,000,000—i.e., 10 tows of 180,000 denier each can be processed.

There are three sets of nip rolls in the drafting section. The draft between cutter and delivered drafted sheet is 20. A crimping action in later operations reduces the overall draft of the converter to 18.

An accumulator changes the flat fiber layer into roping form by a gentle condensing action.

Action of the crimp delivery is intermittent. When the box is full and pressure is sufficient to crimp contents, it will deliver into a coiler head. Roving is finally coiled in cans on a revolving table.

Warner & Swasey Co., Cleveland, Ohio.

For additional data, request item J-278, using business reply card on page 262.

50% More Magnetic Strength Added to Eriez Magnets

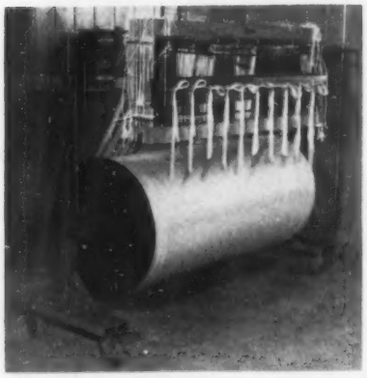
The redesign of the complete line of Eriez permanent non-electric "Standard" and "Jumbo" plate magnets, has resulted in a 50% increase in magnetic strength and a 30% decrease in weight, according to the manufacturer.

The new magnets consist of a series of Alnico castings designed to obtain the greatest external energy possible. The great improvement in these units is said to be the result of efficient design, newly developed Alnico material and new charging techniques.

Both models are available for installation in metal or wooden chutes, feed tables, hoppers, etc., with or without hinges. Sizes range from 4" to 72" wide in increments of two inches. Larger units or special shapes are also available. Magnetic strength will last indefinitely, it is claimed.

Eriez Mfg. Co., Erie, Pa.

For additional data, request item J-453, using business reply card on page 262.



Warp beam truck (Fisher).

Warp Beam Truck Features Versatility

A new warp beam truck is extremely versatile, being basically designed for easy conversion for use by manual operation, tram rail operation, or by hydraulic ram operation. It picks up the warp beam from the slasher, carries it to the tying-in room, then it is used for storage until it is rolled into the weaving room.

One of the trucks is designed to carry large diameter warp beams through narrow alleys. The heddle racks are useful for rayon and fine cotton yarns where the heddles should be held off the warp threads in storage.

Fisher Manufacturing Co., Hartwell, Ga.

For additional data, request item J-156, using business reply card on page 262.

Wire Rope Hoist for Utility Service

The Type "J" Wire Rope Hoist is designed expressly to meet the growing demand for a low-priced unit for utility service. Suitable for special lifting requirements or general handling operations, this hoist moves materials quickly and efficiently; saves valuable time, and conserves the energy of employees.

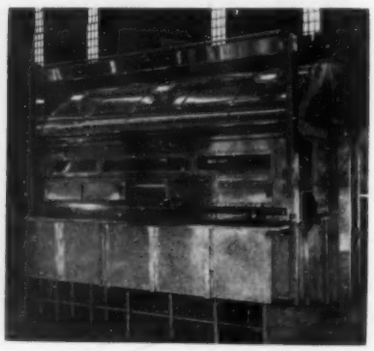
Adaptable to stationary, hook, or trolley mounting, the unit is available in ¼, ½, and 1-ton capacities with pendent rope or push button control. All models are equipped with totally-enclosed, ball bearing motors.

Robbins & Myers, Inc., Springfield, Ohio.

For additional data, request item J-198, using business reply card on page 262.

Dyebox Has Independent Oval Reel Supports

A fully enclosed stainless steel dyebox features all-stainless steel welded oval reel supports. These supports are independent of the box and transmit the load directly to the floor.



Stainless steel dyebox (Blickman).

The box has safety glass windows on all four sides for complete visability. Counter-balanced doors at front and rear allow quick one-hand opening for access to the interior. Heat and moisture are kept inside the box, resulting in better control of the dyeing operation and in savings of steam, water and dyestuffs.

S. Blickman, Inc., Weehawken, N. J.

For additional data, request item J-121, using business reply card on page 262.

Aluminum Pipe Fittings Cut Erection Costs

Aluminum fittings for pipe structures, that cut installation time up to 80 per cent, have recently been marketed. Called Nu-Rail, these fittings consist of just three basic units, from which fourteen different arrangements can be made, plus a modified cross, floor and wall flange, and end plug.

All pipe threading and welding is eliminated with these fittings by the use of two hollow point screws recessed in each reinforcing rib. Uses include hand, stair and guard rails; playground equipment; portable scaffolds; etc.

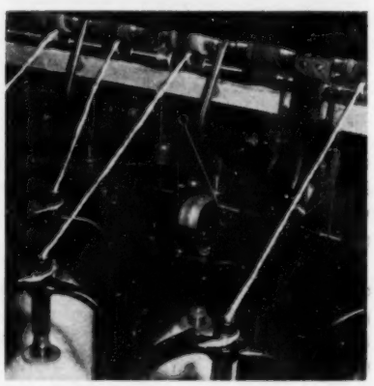
Reynolds Metals Co., 2500 South Third Street, Louisville 1, Kentucky.

For additional data, request item J-199, using business reply card on page 262.

Roving Frame Stop Motion Sensitive to Defective Stock

A roving frame stop motion has been invented (Pat. No. 2,129,639) and developed by S. J. Adams of Abbeville, South Carolina, which is said to stop the frame as soon as there is any defect in the roving being delivered to the bobbins, such as singlings, doublings, broken ends, plugged flyers, bad piecings, and roll laps.

The Adams stop motion consists of a drop wire with an eyelet at one end through which the roving runs. The other end of the drop wire goes through a slot cut in the roll beam flange directly below each front roll. The drop wire is mounted on an insulated pivot just below its slit in the frame, and when no roving is passed through the eyelet, the wire is free to pivot until it rests against one side or another of the slit in roll beam flange. While in such a tilted position, it closes an electric circuit which shuts off the frame. When, on the other hand, the tension of the roving holds the drop wires in an upright position, the electric circuit is open and in no way influences the normal operation of the machine.



Roving frame stop motion (Stewart).

The stop motion not only improves the quality of roving, but when the correct lay and tension are obtained a larger package is made.

It is possible for an operator to handle more frames equipped with stop motion than without. Also, the roving delivered to the spinning room is of such quality as to reduce ends down.

Ralph B. Stewart, Attorney at Law, National Press Building, Washington, D. C.

For additional data, request item J-279, using business reply card on page 262.

Automatic Warp Tying Machine

The Titan automatic warp tying machine can tie warps with and without lease and also leased warps with unleased warps. The machine can operate as a stationary unit or as a portable unit.

An advantage claimed for the machine is that it reveals eventual double threads and thus controls the lease during tying.

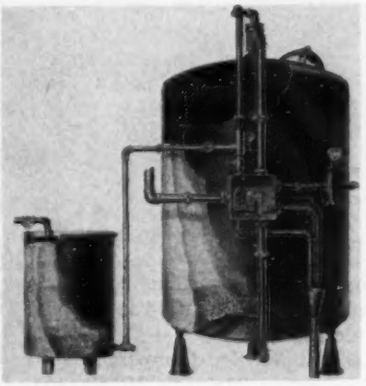
According to the manufacturer, the machine will tie from 6,000 to 18,000 knots per hour, depending on the type of yarn. It is said to be extremely simple to operate.

Edda International Corp., 470 Fourth Ave., New York 16, N. Y., U. S. agents.

For additional data, request item J-150, using business reply card on page 262.

Zeolite Softener Features Single Control Valve

Cochrane zeolite softeners now feature as standard equipment the hydromatic single control valve. Use



Zeolite softener (Cochrane).

of the valve results in smoother softener control, positioning being friction free, and free from hydraulic shock, with its attendant disruption of the zeolite bed within the container.

The valve provides four operating positions for separate control of backwash, regenerant feed, rinse, and service, permitting flexibility in that separate flow rates may be assigned to each operation, unaffected by the requirements for other phases of operation.

Cochrane Corp., 3116 N. 17th St., Philadelphia, Pa.

For additional data, request item J-138, using business reply card on page 262.

Spindles Reconditioned by Gastonia Firm

Badly worn spindles can now be reconditioned by a firm specializing in the production and repair of textile machinery parts. Worn spindle tops can be cut off and a new piece of spindle steel butt-welded onto spindle blade and the top ground to specified size. Also, worn tops can be built up with hard chrome plate and ground to size specified. After retopping spindle blade, a new whorl is installed if required.

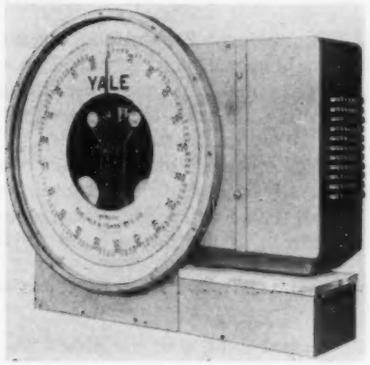
Band driven spindles can be modified to accommodate tapes.

Gossett Machine Works, Inc., Gastonia, N. C.

For additional data, request item J-162, using business reply card on page 262.

Scale Weight Printer

A new type of weight printer is now being offered as an integral part of Load King industrial scales. It prints actual weights in numerals 9/32" high. The various weights in a series can be identified by printing opposite the recorded weight from one to eight symbols, numerals or letters. Therefore, more accurate data becomes available for inventory control, shipping records, production records, wage incentives, etc.



Weight printer (Yale & Towne).

The weight printer can be adjusted to take tickets from 3" x 5" up to 8½" x 11" with one to four copies.

Yale & Towne Manufacturing Company, Philadelphia Division, Philadelphia, Pa.

For additional data, request item J-230, using business reply card on page 262.

Individual Card Drives Offer Several Advantages

Individual card drives of improved design consist essentially of an electric motor mounted on a plate attached to the card arch, a variable pitch V-belt pulley, and a speed reduction unit mounted directly on the main cylinder shaft.

A special high torque, high overload, 1½ hp, 1750 rpm motor is used to power the drive. Its special characteristics permit it to handle the high inertia loads encountered in starting a card. It is equipped with a heavy duty, reversing magnetic controller which provides overload protection.

This motor, which is set directly above the main shaft of the card, carries a single groove, variable pitch pulley which permits a variation of 20% in the operating speed selected. A single, steel cable V-belt transmits power from the variable pitch pulley to a helical gear speed reduction unit which is mounted directly on the main card shaft.

A guard cover over the belt drive protects personnel from injury, and a pulley on the motor shaft outside this belt guard is used to run a stripper roll when hand stripping the card. A torque arm is attached to the reduction unit at two points and extends to the floor to prevent rotation of the gear case. It also transfers the counter torque of the drive to the floor instead of to the card itself, and gives horizontal loading to the main bearings.

American Pulley Co., 4200 Wissahickon Ave., Philadelphia, Pa.

For additional data, request item J-277, using business reply card on page 262.

Card drive (American Pulley).

Automatic Heddle Indicator

An automatic heddle indicator, manufactured by Titan of Copenhagen, Denmark, is now available in this country.

An endless paper band, which is perforated in accordance with the required design, automatically indicates to the drawing-in operator by means of a non-dazzling lamp signal, the heddle through which the following thread must be drawn. It involves no extra hand movement on the part of the operator and performs the work speedily and efficiently, whether the pattern be complicated or simple. Unskilled labor may be safely employed in operating this apparatus, it is claimed.

Edda International Corporation, 470 Fourth Ave., New York, N. Y., U. S. agents.

For additional data, request item J-151, using business reply card on page 262.

Circular, Rotating-Shelf Bins Speed Handling

Reduction of time required for both storing and servicing parts and tools is realized by installing Rotabins, according to the manufacturer of these circular, rotating-shelf units.

In addition to reducing the manpower necessary in the storeroom, savings in floor space up to 50% are claimed. Dark corners are eliminated. Items are easily and quickly located.

Trays rotate on ball-thrust bearings and will not sag or break when fully or unequally loaded. Since Rotabins stand independently on a solid, heavy steel base, installation is simple.

The Frick-Gallagher Mfg. Co., 400 Shubert Building, Philadelphia 2, Pa.

For additional data, request item J-152, using business reply card on page 262.

Pneumatic Vacuum Cleaner for Spinning Frames

Thoma Company (Switzerland) has recently made available for sale in the United States a pneumatic vacuum cleaner for spinning frames which collects broken ends.

A duct running across the whole length of the frame under the creel serves as a central passage. Connected with this is the suction pipe, which is built in place of the scavenger roll, containing a suction opening for each spindle, located directly under the yarn delivery of the steel roll. At the end of the frame the central duct opens into a filter box with a ventilator.

The equipment is normally belt driven by the cylinder. In special cases a small electric motor may be used for the drive of the ventilator.

The ventilator sucks the air from the central duct, thus creating a vacuum in the suction pipe, which is absolute throughout the length of the pipe due to special construction. In case of an end down the untwisted yarn is sucked through the suction opening and delivered into the filter box where the fibers accumulate. These fibers are in a clean and loose condition ready for reworking.

Specific advantages claimed for this equipment are:

L-shaped suction funnel permitting unimpeded flow of the air current in one direction—this eliminates the creation of air turbulence leading to clogging and consequently poor performance; employment of pipes drawn without seams and subjected to the Alumilite process; the connection of the suction pipe with the elbow leading to the main channel is made from a centrifugal aluminum casting, insuring perfect control of the air flow and preventing any clogging of the suction pipe.

American Textile Engineering, Inc., Arlington, N. J., sole U. S. agents.

For additional data, request item J-118, using business reply card on page 262.

SUGGESTION BOX

A modern streamlined suggestion box, with either one, two or three panels, is available in attractive hammer-tone silver finish on heavy gauge steel.

Posters and bulletins are displayed in a burnished stainless steel frame which blends harmoniously with the background finish. The steel suggestion receptacle and panels can be used separately, if desired.

Elliott Service Company, 30 N. MacQuesten Parkway, Mt. Vernon, New York.

For additional data, request item J-659, using business reply card on page 262.

Take-Up Roll Covering Has Heavy Duty Crepe Surface

A loom take-up roll covering features a heavy-duty crepe surface. The product, designated Accotex NO-732, has been developed especially for use with fine cotton goods, heavy rayon and silk fabrics, and loosely woven items such as tire fabric.

Armstrong Cork Co., Lancaster, Pa.

For additional data, request item J-105, using business reply card on page 262.

Pigment Colors for Textile Printing

Two new additions to the line of Aridye pigment colors for textile printing are Aridye Red LDY and Aridye Black F2K.

Aridye Red LDY produces yellowish red shades of exceptional fastness to light. Even in pastel shades, it has a Fade-Ometer rating of 100 hours. Aridye Red LDY can be blended with the bluer Aridye Red LDB to produce almost any shade of red or pink. In addition to its superior light-fastness, this new color has excellent fastness to washing, chlorine, dry cleaning, perspiration, hot pressing, plisseing, etc.

Aridye Black F2K produces a bloomy jet black shade. It provides sharp outlines, excellent pegs, and has superior running properties. Aridye Black F2K has excellent fastness to light, washing, dry cleaning, plisseing, and Trubenizing.

Interchemical Corporation, Textile Colors Division, Fair Lawn, N. J.

For additional data, request item J-464, using business reply card on page 262.

Ambler Superdraft System for Worsted Spinning

The Ambler Superdraft System, as its name implies, is a system of high speed drafting which is reported to greatly simplify the preparatory processes in worsted spinning.

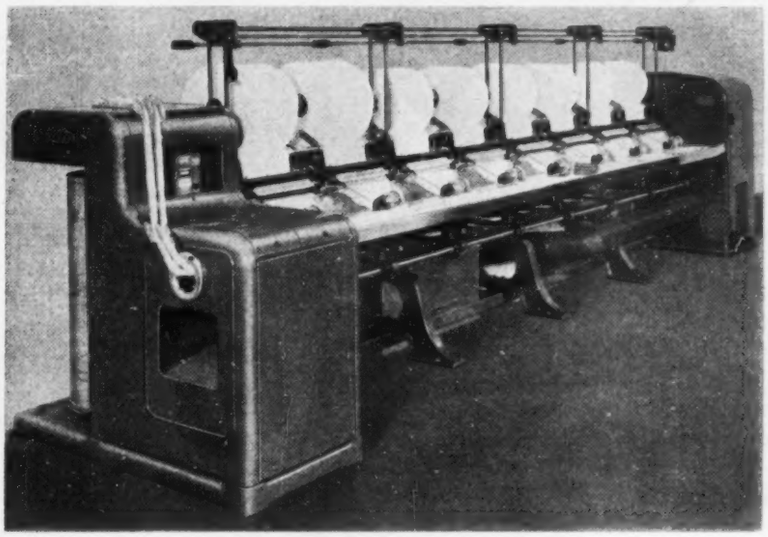
According to reports, the device permits drafts ranging from 20 to 200 when spinning worsted yarn on cap, ring and flyer frames, thereby reducing by two-thirds the labor and machinery required in the preparatory processes of a conventional worsted spinning plant. In addition, production of frames equipped with the device is said to be slightly increased since the much heavier roving permits the use of a much larger bobbin in the creel of the spinning frame.

The inventor of the device is Air Vice-Marshal Geoffrey H. Ambler, a director of Fred Ambler Limited, worsted spinners in Bradford, England.

Sales and installation of the equipment will be handled by Prince-Smith & Stells, Limited, Keighley, England. The device is not yet available in this country.

Atkinson, Haserick & Co., 211 Congress St., Boston 6, Mass., sole U. S. agents for Prince-Smith & Stells, Limited.

For additional data, request item J-120, using business reply card on page 262.



WHITIN'S HIGH SPEED COMBER

The Model "J," eight-head, high-speed comber has been added to the line of improved machines available to the textile manufacturers.

Some of the important developments incorporated in the Model "J" comber are: an improved detaching roll motion, redesigned nipper frame and top comb, spring weighting, increased production, additional streamlining and a reduction in horsepower required per pound of sliver produced.

Whitin Machine Works, Whitinsville, Mass.

For additional data, request item J-413, using business reply card page 262.

Beam Let-off Drive for Low-Power Winding Operations

A beam let-off drive provides tension control for low-power winding or unwinding applications such as beam let-off or cloth wind-up on warp knitting machines or looms of any type. It may also be used on bobbin winders and similar applications.

The drive is actuated by dancer contact signals from the material being wound or unwound. The drive motor speed varies over a wide range to maintain tension regardless of reel build up or material speed.

Westinghouse Electric Corporation, Box 868, Pittsburgh 30, Pennsylvania.

For additional data, request item J-407, using business reply card on page 262.

Preshrinking Makes Polyethylene Fabrics Stable at 165 Degrees

A new finishing treatment which preshrinks polyethylene fabrics to less than two per cent residual shrinkage at temperatures up to 165 F has been developed. This, it is believed, makes possible the widespread use of polyethylene fabrics in automobile seat covers, as well as in upholstery generally, draperies, and various other applications.

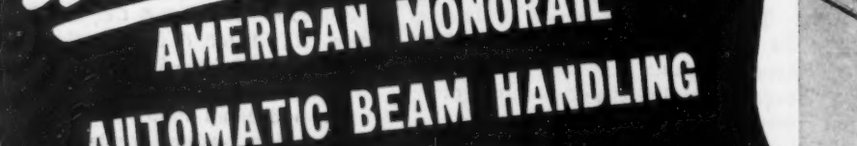
The method of heat stabilizing these fabrics consists of first treating the fabric in a semi-relaxed state with hot water, hot air or steam. This permits shrinkage in both warp and filling. After shrinkage, the fabric receives a brief steam treatment on a decating machine to make it more uniform and flexible.

When a final smooth surface is required, as in seating fabrics, calendering is recommended. The treatment produces a fabric of pleasing hand and flexing quality.

American Viscose Corp., Marcus Hook, Pa.

For additional data, request item J-450, using business reply card on page 262.

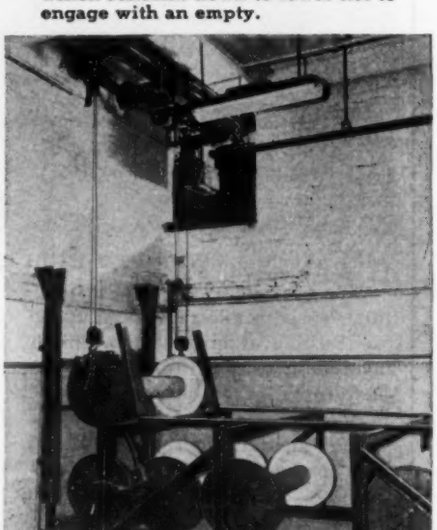
Another AMERICAN MONORAIL AUTOMATIC BEAM HANDLING INSTALLATION



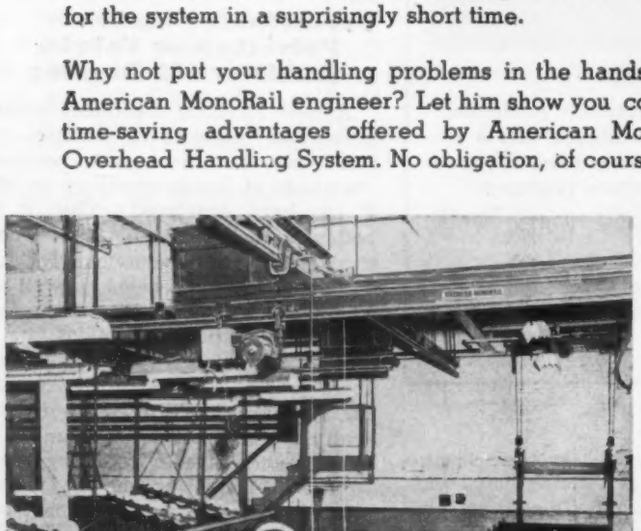
Automatic dispatched carrier stops over rack in slasher room, lowering beam which is guided into position for deposit on the upper tier of rack. Beam automatically rolls off hooks which continue down to lower tier to engage with an empty.

To eliminate hand pushing of heavy beams on dollies up and down ramps between various rooms appeared to be a very complicated and costly job. With hundreds of overhead handling installations to draw upon, American Mono-Rail engineers, by using a few simple innovations, installed this system. Now, full beams are automatically transferred from the warper room on one level, to the slasher room on a lower level, with return transfer of empty beams without attention after carrier is started. Savings effected will pay for the system in a suprisingly short time.

Why not put your handling problems in the hands of an American MonoRail engineer? Let him show you cost and time-saving advantages offered by American MonoRail Overhead Handling System. No obligation, of course.



Carrier unit automatically raises empty beam to upper limit whereupon the unit returns to the warper.



Hand pushed crane with electric hoist takes beams from rack to interlocking spur track over each slasher creel.

THE AMERICAN MONORAIL COMPANY

13108 ATHENS AVENUE CLEVELAND 7, OHIO

Hot Water Heater Package for Washroom Service

A new "Heater Package," designed principally to heat water for washroom service, brings an answer to the danger of burning or scalding from excessively hot water. It holds maximum discharge temperature always within 10 degrees of thermostat setting.

The heater package consists of an instantaneous steam heater, an auxiliary tempering chamber, a direct-operated solenoid valve to admit steam to heater, and a controlling thermostat. It is a compact size unit, well suited to the needs of modern plant layout. The heater proper hooks up to high pressure steam lines; needs no reducers.

The Johnson Corporation, 815 Wood St., Three Rivers, Mich.

For additional data, request item J-170, using business reply card on page 262.

Heavy Duty Polisher-Scrubber

A new all-purpose floor machine is identified as the "Johnson's Wax Super 16." The heavy-duty, chrome plated machine is made to handle any type of floor maintenance job, the manufacturer claims. Besides polishing and scrubbing, the machine may be used to sand, steel wool, grind, and wax floors of all kinds.

Uniform distribution of weight over the brush area provides for smooth operation, while finger springs keep the machine riding level regardless of the condition of the floor. The speed of the Super 16 enables an operator to polish 4,500 square feet per hour, according to the manufacturer.

S. C. Johnson & Son, Inc., Racine, Wis.

For additional data, request item J-171, using business reply card on page 262.

Economical Vibration Control with Cork-and-Rubber Material

For the majority of applications Elasto-Rib, a cork-and-rubber mounting, requires no bolting or cementing. This economical, efficient material for controlling transmission of vibration and noise consists of a layer of cork between two layers of deep-grooved, high-grade, oil-resistant synthetic rubber permanently bonded at the factory.

According to the manufacturer, the product gives better noise and vibration isolation than either cork or rubber alone. It is available in sheets 24" x 36", either from mill supply houses or direct, or can be had cut to size and shape as required.

Korfund Co., Inc., 48 Thirty-Second Place, Long Island City 1, N. Y.

For additional data, request item J-172, using business reply card on page 262.

New Caster for Severe Loads

An exceptionally strong steel caster of simple design and sturdy structural shape to prevent bending and distortion under severe load, is designated SteelWate. Swivel and rigid models are available.

Of standard general dimensions to permit interchangeability with other similar casters, or easily welded to a metal frame, these casters are adaptable for many uses on all types of handling equipment where it is desirable to combine strength with light weight.

Thread guards are available in both swivel and rigid caster design, for all sizes and types of wheels. Where thread guards are applied, a lubricating type axle with spring and ball check lubricator is installed in the axle head, for lubrication of the wheel bearing.

Divine Brothers Co., 200 Seward Ave., Utica 1, N. Y.

For additional data, request item J-146, using business reply card on page 262.

Instrument for Automatic Comparison of Yarns

Yarn evenness, cleanliness, and character may be observed with a French-made instrument which automatically provides a view of two yarns for comparison purposes.

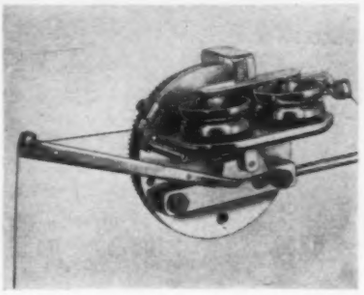
Two bobbins which are to be tested and compared are inserted in the apparatus. From these two bobbins the yarn runs continuously through the apparatus and each thread forms an animated picture in the window opening on top, consisting of 33 parallel laying threads. The first thread moves to the right, the second to the left, the third again to the right and so on. One thread, therefore moves in the opposite direction to the adjacent one so that cuts, faults in spinning, impurities, etc., are constantly displaced, pass each other and thus show up very distinctly.

At the same time while the thread

TWO NEW TENSION COMPENSATORS

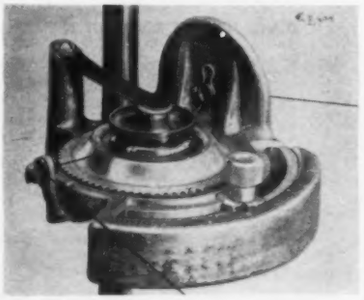
Two new tension compensating devices have been developed for the textile industry—the Twin Disc Compensator and the Warping Compensator. Both are self-contained units and can easily be attached to existing textile machinery, according to the maufacturer.

The twin disc compensator was developed for use on high speed automatic winding machines, where it insures constant tension regardless of speed, back drag, yarn friction or knots. Design of



the device is based on the principle of compensating a pre-set maximum tension by the variables inherent in yarn handling at high speed. This is accomplished by distributing the tensioning force between two sets of spring-loaded compensating discs.

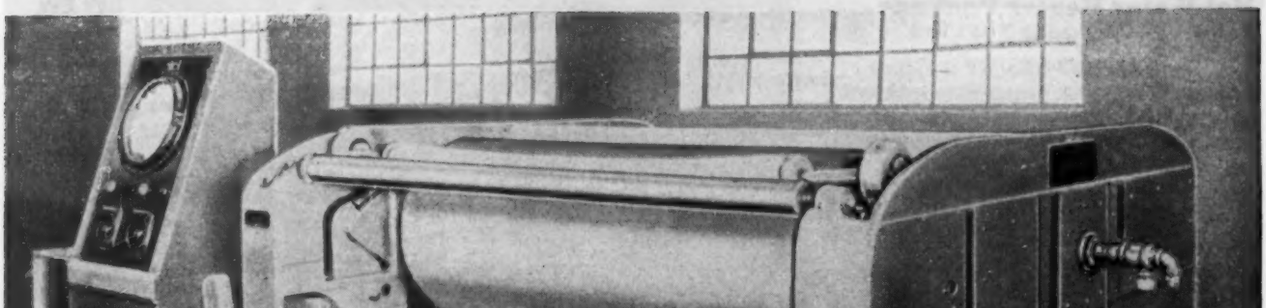
The new warping compensator will maintain uniform tension on every end in the warp, it is claimed. The changing yarn tension itself acts on a control arm which varies the pressure on the



spring-loaded discs, resulting in uniform output tension.

Walter Kidde & Co., Inc., Belleville 9, N. J.

For additional data, request item J-605, using business reply card on page 262. Please specify item.



Latest-type Butterworth Horizontal Calender

"... the first practical Horizontal Calender"

New in design . . . new in outstanding features . . . yet the balanced pressure design of this new Butterworth Horizontal Calender permits reduction in over-all weight and size. Requires no more floor space than vertical calenders.

In the completely enclosed streamlined design, there are four balanced pneumatic air cylinders. Pressures up to 15 tons can be adjusted to each side of the roll to assure even pressures across the face.

Rolls are protected against damage by a simple valve mechanism for jumping seams. Rolls come apart just enough to allow seams to pass and then are brought together again smoothly and easily.

Standard equipment includes: (1) automatic threading device, (2) ball-bearing friction let-off and disc winder, (3) pressure recording and drum control speed regulator, (4) steam heat to center roll. Gas heat arrangement and temperature control equipment are available if desired.

For complete performance data, talk to Butterworth engineers. Or write us today.

BUTTERWORTH

H. W. BUTTERWORTH & SONS COMPANY, Phila. 25, Pa. • Providence Div., Providence R. I. • 1211 Johnston Building, Charlotte, N. C. • In Canada: W. J. Westaway Co., Hamilton, Ont.

Representatives in Principal Countries of the World

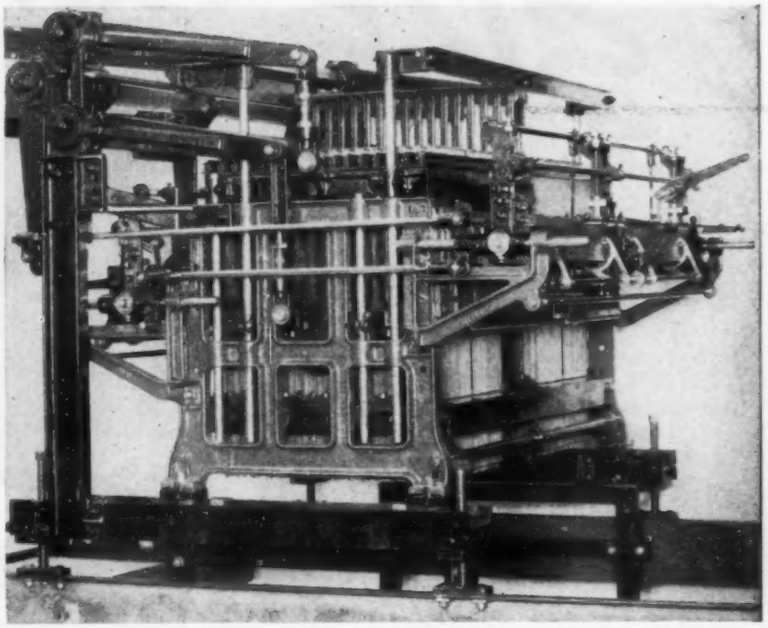
is moving, it rotates slowly on its own axis, whereby not only a limitless length of the thread but also the whole circumference of the thread can be examined. Any impurities which adhere to only one side of the yarn can be seen. On leaving the thread picture zone the yarn is wound up on a cross wound bobbin.

Interchangeable background boards in different colors are located at a given distance behind the thread pictures in order to offer the most suitable contrast for every sort and color of thread. Due to a special light arrangement, either direct or indirect light may be applied to the boards; also two different speeds are available.

The whole apparatus is enclosed in a housing so that all mechanical parts are protected. Only two illuminated fields of threads are visible through the framed window.

American Textile Engineering, Inc., Arlington, N. J., sole U. S. agents.

For additional data, request item J-114, using business reply card on page 262.



Double lift, double cylinder, high speed Jacquard head (C&K).

Universal Joint Available in 14 Sizes

Requirements for universal joints up to 4-inch hub diameter for textile mill applications are now met in a complete line of universal joints. The range includes every standard size from ⅜" to 4" hub diameter, according to the manufacturer.

The universals are guaranteed to be concentric within .0005". Grinding of inside forks, bearing surfaces of center blocks, and all operating surfaces is to a plus-accuracy that is said to prevent all binding backlash and inplay. All rivets are ground flush with the body to permit working inside tubing, or in close quarters.

Lovejoy Flexible Coupling Co., 5001 West Lake St., Chicago 44, Ill.

For additional data, request item J-183, using business reply card on page 262.

New C&K Jacquard Head for High Speed Looms

The design of a new 2608-hook, double lift, double cylinder, high speed jacquard attains three major objectives: smoother operation, reduced fixing and maintenance, and high speed capabilities.

Design cards are presented alternately to each of the two cylinders, reducing the speed of each cylinder to one half the speed of the loom crank shaft, thus making high speed operation possible without wear and tear on the jacquard cards. Two card packs are employed.

The cylinders are operated entirely independent of the griffs by a cylinder lever driven by a connecting rod from a crank on the loom bottom shaft. Heavy type jacquard frames are employed. Four griff shafts are used in each frame, providing a smooth working and perfectly balanced griff.

A heavy "I" beam adjusting shoe arrangement with four 1" diameter adjusting screws and four heavy adjusting shoes support the jacquard and provide a more simplified means for adjusting the jacquard height.

Lifting and cylinder levers are located above the jacquard. The

THE SQUEEZER-UPENDER FOR FORK TRUCKS

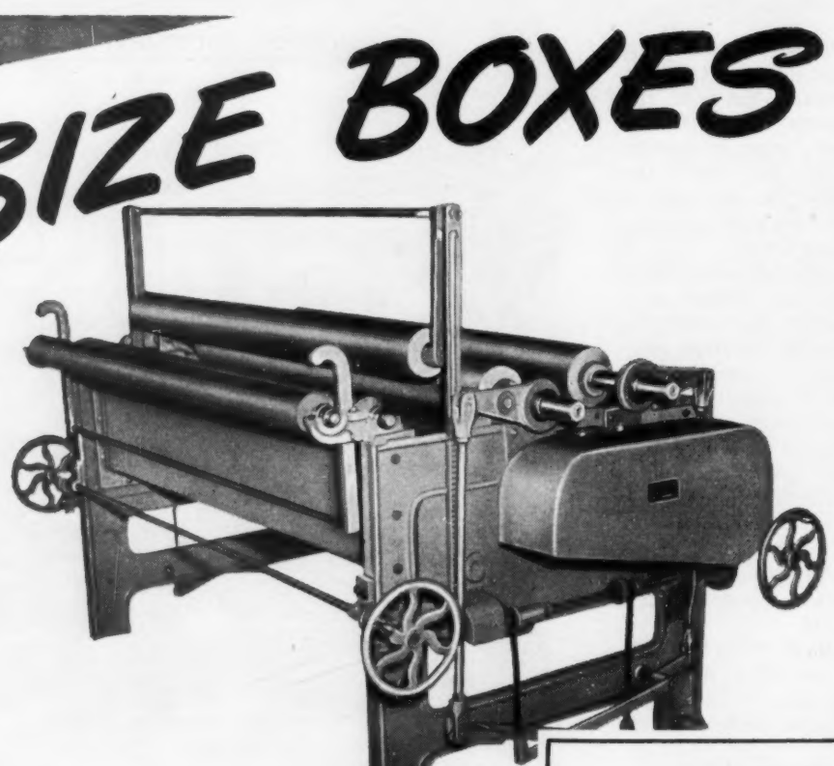
The Squeezer-Upender attachment grips a cylindrical object with two sets of clamp arms, lifts it for carrying or tiering, revolves it for dumping or inverting to as much as 180 degrees, and therefore handles the object equally as well in a vertical or horizontal position.

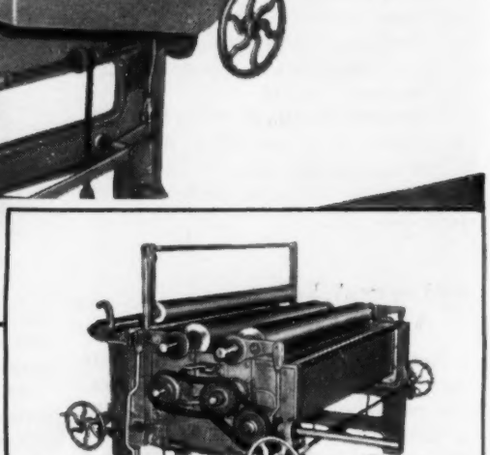
With slightly varied "squeezer arms," it can handle wooden and metal barrels; paper-board and metal drums; rolls of cloth, paper and similarly rolled materials to be lifted, inverted or dumped. The attachment is displayed on an electric battery-powered fork-lift truck of new design which reduces the turning radius of the model.

Clark Equipment Co., Industrial Truck Division, Battle Creek, Mich.

For additional data, request item J-422, using business reply card on page 262.

SIZE BOXES

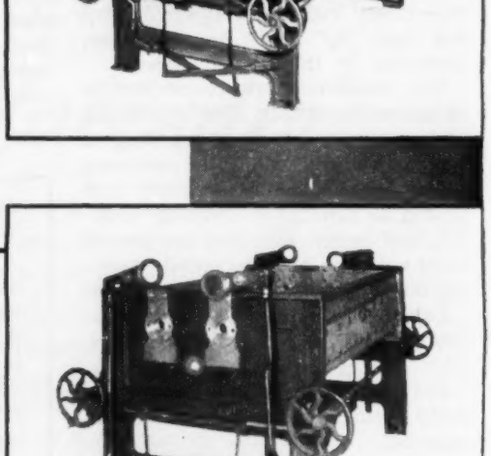




Above: Built of stainless steel, steam-jacketed, or plain, strongly braced. Steam jacket helps prevent dilution of size. Chain drive covered.

Right, top: Ball bearings on size rolls. Ball bearing hangers on squeeze rolls hold them in perfect alignment and are connected to handwheel to permit raising for washing purposes. Note chain drive.

Right, below: View with rolls removed. Deep brass stuffing boxes will not leak size.



This size box is typical of the mill machinery developed and manufactured in our foundry and shop. We can help you to make your manufacturing economical and more efficient. Often equipment you already have can be modernized at minimum cost. We will gladly make a study of your equipment without cost or obligation and submit proposals with estimates. If we can help, write us.

WEST POINT FOUNDRY & MACHINE CO.

(Batson-Cook Company, Owners)

WEST POINT, GEORGIA

griffs are thus lifted from above, reducing wear on the griff shaft bushings in the jacquard frame to a minimum.

Crompton & Knowles Jacquard & Supply Co., Pawtucket, Rhode Island.

For additional data, request item J-239, using business reply card on page 262.

Portable Liquid Mixer

A unique belt-type portable industrial mixer is now being manufactured. The mixer is designed so that its motor hangs on the outside of the mixing tank out of the path of harmful mixing fumes and spray. However, the entire unit is always in perfect balance because the weight of both mixer and motor is carried below the center of gravity, requiring little pressure on the clamp to hold the unit on the edge of tank or drum. The unusual arrangement also eliminates the possibility of oil or grease dripping from motor to mixture.

Other outstanding features claimed for the mixer are its unlimited adaptability, low cost of operation, and precise mixing speeds. Called the Marvel Mixer, it is described as ideal for small or medium sized plants where production schedules call for more than one mixing job, each one of which may require a different mixing speed for utmost efficiency.

United Electric Motor Co., 178 Centre St., New York 13, N. Y.

For additional data, request item J-606, using business reply card on page 262.

New Protein Fiber

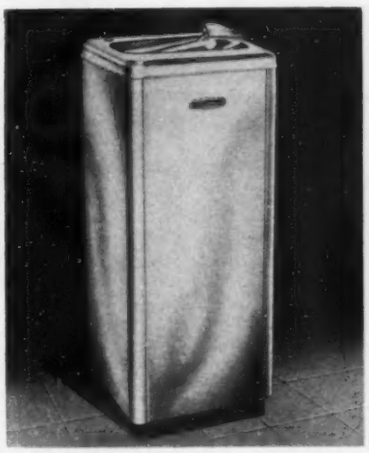
Vicara, a protein fiber made from corn, is produced as a soft, uniform fiber, light golden in color. It is clean, free of noils, and contains no foreign matter. A crimp in the fiber facilitates carding and spinning.

Blends containing Vicara can be processed on conventional equipment. The fiber can be blended with cotton, wool, rayon, acetate, nylon or ramie and dyed with the usual dyes used for the other fibers. It can be bleached, stripped, desized and scoured.

Vicara fibers can be supplied in any staple length from ½ inch to 6 inches and in deniers from 2 to 4. Shipment is made from the plant in Taftville, Conn., in 300 and 500-pound bales. The fibers are available in tow forms if desired.

Virginia-Carolina Chemical Co., Richmond, Va.

For additional data, request item J-273, using business reply card on page 262.



ELECTRIC WATER COOLER

Especially adaptable to the textile industry is this new electric water cooler. The completely stainless steel exterior insures long-time service under severe atmospheric and humidity conditions. The water-cooled condenser is not affected by lint or dust. Refrigeration system is hermetically sealed. Water tank and pre-cooler are also housed in vapor sealed container. In addition to the natural stainless steel finish, the unit is also available in baked Hammerloid gray.

Cordley & Hayes, 443 Fourth Ave., New York 16, N. Y.

For additional data, request item J-420, using business reply card page 262.

Slub Catcher for Worsted and Spun Rayon Yarns

The Auto-Nip Slub Catcher was designed primarily to inspect worsted and spun rayon yarns spun on the American system of spinning.

The slub catcher is said to be very effective in slubbing soft slubs, especially of the torpedo type. Skinbacks are minimized due to the fact that the device permits a much larger opening than is possible when trying to catch these soft slubs with a fixed blade type of slubber.

The opening of the slub catcher to meet the inspection requirements of various counts can be accurately and easily accomplished by means of a feeler gauge.

The slub catcher can be readily installed on any standard No. 44 tension bracket. Therefore, it can be used individually or in conjunction with a fixed blade slub catcher device.

Universal Winding Co., Providence 1, R. I.

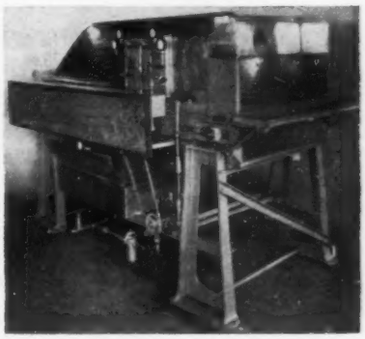
For additional data, request item J-271, using business reply card on page 262.

New Dry Chemical Fire Extinguisher

A dry chemical type fire extinguisher has features that make it efficient, fool-proof, and easy-to-use.

It is a self-contained unit; the dry chemical is free flowing; there are no parts within the cylinder to become clogged or inoperative; discharge hose and nozzle remain empty until fire extinguisher is actuated.

Available in two convenient sizes, 20-pound capacity and 30-pound capacity, the extinguisher is approved by Underwriters' Laboratories, Inc. The dry chemical is non-conducting.



YARN CONDITIONER FOR CONES AND DYE PACKAGES

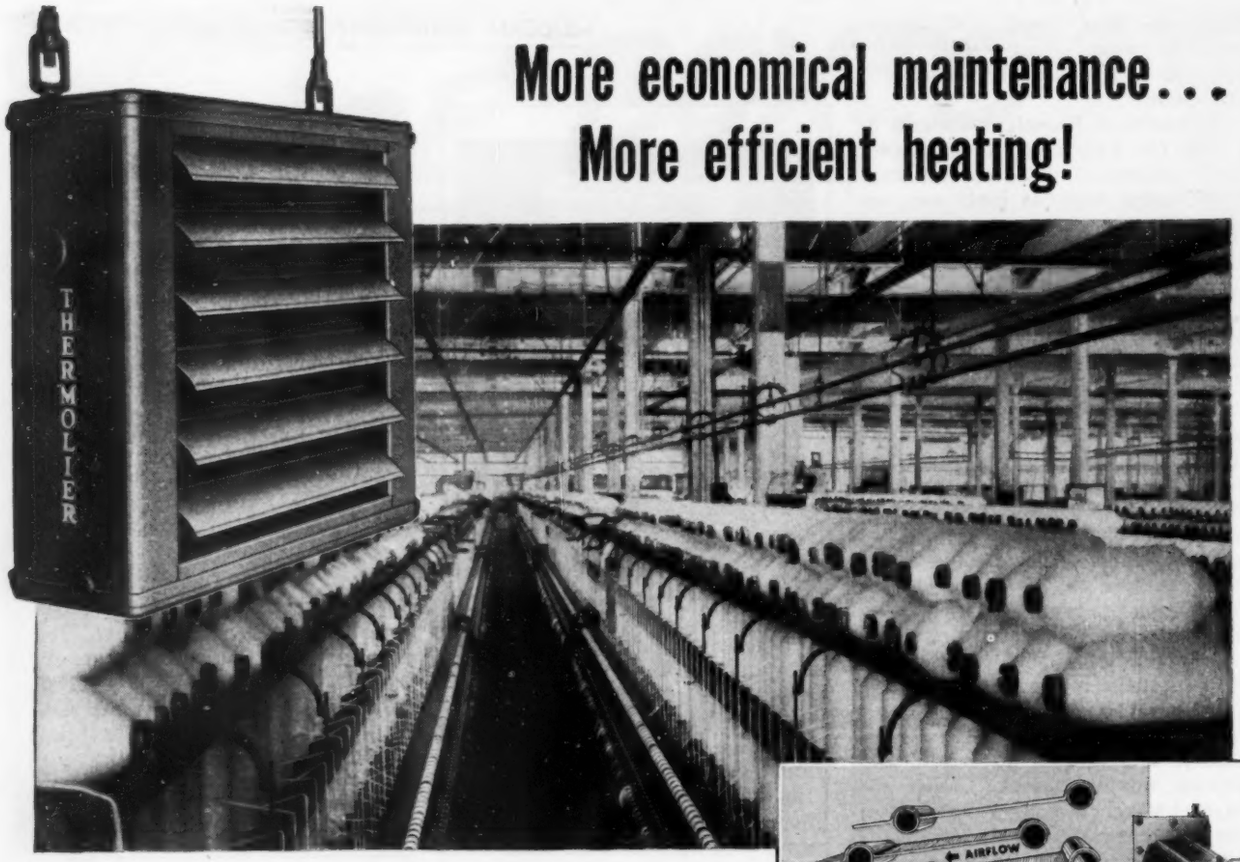
Specially designed to handle yarns on cones and dye packages, Model 3AY-N permits uniform conditioning with balanced moisture control.

By means of top, bottom, and side sprays produced by 17 pressure nozzles, a water solution of Hygrolit conditioning agent is dispersed throughout the package. The liquid lubricates yarns, protects against mildew, and replaces natural moisture.

Kearny Manufacturing Company, Inc., Kearny, N. J.

For additional data, request item J-415, using business reply card page 262.

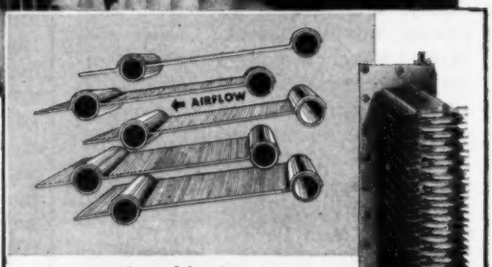
More economical maintenance... More efficient heating!



with the self-cleaning TEXTILE THERMOLIER

Incorporating all the features that have made the standard THERMOLIER a leader, the new TEXTILE THERMOLIER banishes the problem of clogging and loss of heating capacity, and cuts cleaning to almost nothing.

TEXTILE THERMOLIER proved its superiority in this actual spinning room test. A conventional unit heater clogged solid in four days . . . its heating capacity was lost as clogging increased. Finally it had to be shut down for a prolonged cleaning period. After three weeks of operation, TEXTILE THERMOLIER showed negligible accumulation . . . it was quickly cleaned with an air hose.



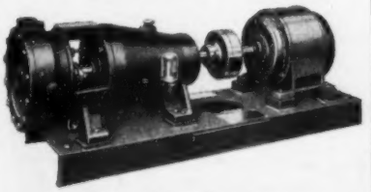
Cutaway view of heating element showing unobstructed air flow passages (drawn to exact scale)

- Free flow of air self-cleans the heating surfaces. Lint, fly and dirt sweep clean from horizontal trailing edge.
- Maximum capacity provided at all times and annoying and destructive water hammer eliminated because built-in pitch of tubes and internal cooling leg assure continuous drainage of condensate.
- Safety and durability assured with leak-proof tube-to-header construction.
- Plain thermostatic trap, the simplest and least expensive kind of trap, made practical because of Thermolier's exclusive internal cooling leg. Write for the full story.

99 YEARS — WHENEVER PIPING IS INVOLVED

GRINNELL

Grinnell Company, Inc., Providence 1, Rhode Island. Branches: Atlanta • Buffalo • Charlotte • Chicago • Cleveland • Cranston • Fresno • Kansas City • Houston Long Beach • Los Angeles • Milwaukee • Minneapolis • New York • Oakland • Philadelphia • Sacramento • St. Louis • St. Paul • San Francisco • Seattle • Spokane



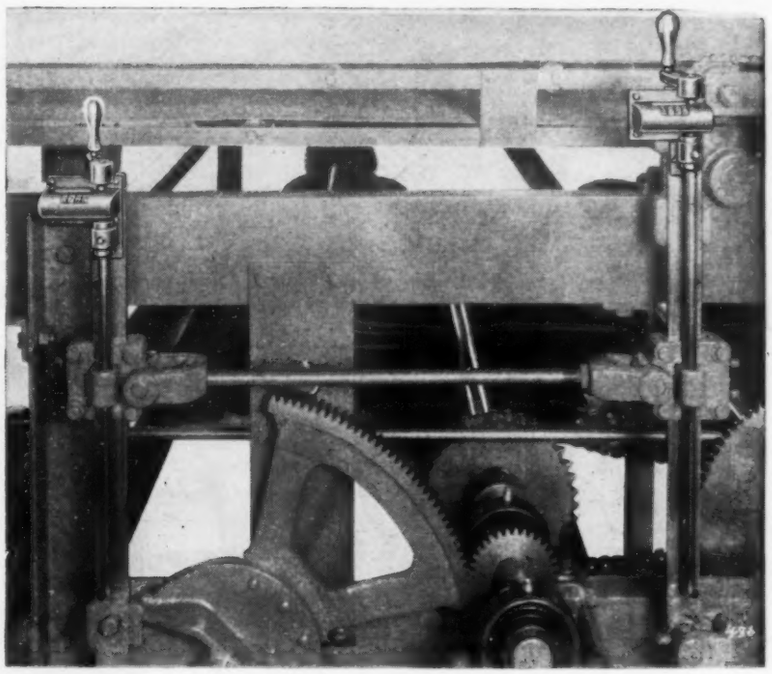
CLOSE COUPLED PUMP CRADLE MOUNTED

Shown here is the Cradle Mounted Compacunit, Type CLFC, one of the many recent additions to the original line of close coupled pumps for industry.

As compact as practical, the Compacunit can be used in various positions with full satisfaction. By removing casing bolts and rotating casing, four discharge directions are possible. Fill and drain plugs are provided at four quarters.

Warren Steam Pump Co., Inc., Warren, Mass.

For additional data, request item J-456, using business reply card on page 262.



Detail of counter application on Alfa cutting machine (Durant).

non-corrosive, non-freezing, non-toxic, and highly effective on flammable liquid and electrical fires, according to the manufacturer.

On-the-spot recharging is a feature of the device.

C-O-Two Fire Equipment Co., P. O. Box 390, Newark 1, N. J.

For additional data, request item J-130, using business reply card on page 262.

Fast-to-Light Acetate Dyes

Three new fast-to-light dyes for dyeing acetate rayon and nylon are Interchem Acetate Green-Blue ALF-40, Interchem Acetate Yellow GLF-40, and Interchem Acetate Pink BLF-40. All three dyes are characterized by exceptional fastness to sunlight. On acetate rayon even pastel shades withstand 40 hours' Fade-Ometer exposure with no color change. They withstand urea formaldehyde finishes.

The dyes can be employed for producing self shades, or in combination with one another for compound shades. They are recommended particularly for dyeing mens' wear, sportswear, beachwear, and better-quality women's wear.

Interchem Acetate Green-Blue ALF-40 produces a brilliant green-ish-blue shade. Interchem Acetate Yellow GLF-40 produces a bright yellow shade. Interchem Acetate Pink BLF-40 produces a bright bluish-pink shade on acetate rayon, and a much bluer shade on nylon. The new dyes are low-temperature dyeing colors, and can be applied on jigs or boxes at temperatures of 160 to 190 F.

Interchemical Corporation, Textile Colors Division, Fair Lawn, N. J.

For additional data, request item J-167, using business reply card on page 262. Please specify item.

Union Special Machine for Heavy Seaming Work

A new machine, Style 53700 A, for handling heavy seaming work, makes the single-needle, Type 401, double-locked stitch and is reported to be especially suitable for work on upholstery and other heavy materials.

It is distinguished by the fact that it has a top and bottom feed which operate together, with the top feed being driven through the medium of an upper rock shaft. This type of feed is known as a "top running feed" and is positive in its action.

Union Special Machine Co., 407 N. Franklin St., Chicago 10, Ill.

For additional data, request item J-272, using business reply card on page 262.

Counter Application on Cutting Machine

A novel method for automatically measuring cutting lengths of hard to handle materials, such as textiles, cotton batting and synthetic products, involves the installation of special Productimeters on Alfa cutting machines.

The illustration shows two Model 4-D-6-3-S Rotary Angle Drive Counters mounted on the linkage of the machine. Crank handles are attached to the top of the counter drive shaft, while the bottom of the drive shaft is attached to the adjusting screws. The two linkages change position as the setting is made.

The Productimeters function as set-up registers to indicate specific lineal measurement. The first time a certain job is to be cut, the operator turns the crank handles to set the figures for footage desired. When the proper setting is determined, the figures are put on the job ticket so that the readings can be made instantly whenever the same cutting job comes up again.

Durant Mfg. Co., 1929 North Buffum St., Milwaukee 1, Wis.

For additional data, request item J-149, using business reply card on page 262.

Leading the parade . . .

CELCOS†

starts off with

FOX WELLS & CO.

Now coming into view . . . Celcos . . . the new Celanese* all-purpose rayon staple fiber . . . one of the latest and greatest Celanese research achievements!

Through the use of Celcos, fabrics can be made to boast a cavalcade of features. Great affinity for a wide range of dyes. Wide possibilities in yarn combinations and blends for a vast variety of patterns. Fabulous fullness of hand. Soft, pleasing drape. Dimensional stability. Strong wrinkle resistance. Easy cleaning.

Watch for Celcos in the new line of textiles. It's out in front . . . and on the march!

Celanese Corporation of America,
180 Madison Avenue, N. Y. 16, N. Y.

Fabric construction: Celanese acetate rayon filament warp with Celanese Celcos filling . . featured by Marchant Company, Greenville, South Carolina.

Celanese® ACETATE RAYON STAPLE FIBER

*Reg. U. S. Pat. Off. †Trademark

Two New Enzyme Products for Desizing Process

Two new enzyme products have been produced for the textile trade. These are Diastafor D and Diastafor Type LC. Information about each of these is as follows:

Diastafor D is a dry enzyme product for desizing, containing 4,000 liquefons per gram.

Diastafor Type LC is a liquid enzyme product for desizing, containing 2,000 liquefons per gram.

Standard Brands Inc., Diastafor Department, 595 Madison Ave., New York 22, N. Y.

For additional data, request item J-209, using business reply card on page 262.

All Steel Box Trucks

A new sturdy all-steel box truck has a smooth interior. The top edge is rolled, allowing materials to be easily and safely pulled over it.

Reinforced with channel iron for greater rigidity, the box is finished in baked enamel.

Standard size: 33" long, 19" wide, 24" deep, with steel casters. Other sizes are made to specifications.

Stackbin Corporation, 1155 Main Street, Pawtucket, R. I.

For additional data, request item J-607, using business reply card on page 262.

New Laboratory Controls Announced by Fisher

A new immersion-type micro-set regulator for laboratory use in controlling liquid temperatures in water and oil baths, or air temperature in ovens, etc., is reported to have a sensitivity of ± 0.02 F over a range of 50 to 220 F. Only 15 inches long, its design eliminates an outer shell so that there is a minimum of lag in response to slight temperature changes.

The "Thermoregulator" features a quick-adjustment sleeve which magnetically moves one of two electrodes so that the regulator will turn heating devices on and off to maintain any temperature within its range.

Also available is a day-night clock switch by means of which the laboratory technician can preset electrical equipment to be turned on or off as long as a week after the switch has been set.

A calendar wheel adjustment permits setting the mechanism to repeat the same on-off cycle each day—or to skip any day of the week.

Fisher Scientific Co., 717 Forbes Street, Pittsburgh 19, Penna.

For additional data, request item J-608, using business reply card on page 262.

Pneumatic Roll Picker

Featuring easily replaced picks in three sizes, a recently developed pneumatic roll picker has a speed of 10,000 rpm. Light in weight (1 lb) and requiring minimum maintenance, this roll picker is cool-running and gives trouble-free performance due to oversize ball bearings.

Skilsaw Inc., 5033 Elston Avenue, Chicago 30, Ill.

For additional data, request item J-263, using business reply card on page 262.

Open Width Machine For Finishing Gabardines

A new seven-tank, open width machine of stainless steel construction is equipped with roller bearing squeeze rolls. Pressure is applied to the rolls by Foxboro air motors, except on the last tank which is equipped with air cylinders to give a 30,000 pound squeeze.

The drive is by individual d-c gear motors controlled by rheostats actuated by built-in dancer roll compensators to give accurate tension control. The entering end of the machine is fitted with cloth guiders and the delivery end with a folder and rolling-up arrangement.

This machine was designed for scouring and crabbing rayons, rayon blends, worsteds, tropicals, serges and gabardines.

Birch Brothers, Inc., Somerville, Mass.

For additional data, request item J-609, using business reply card on page 262.

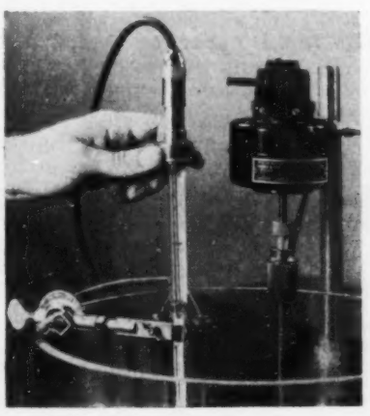
Industrial Vacuum Cleaners

Where a large-capacity, powerful vacuum cleaner of rugged construction is required, the Industrial Master Truck is recommended. A special separator tank for textile applications is available. The vacuum producer is of the four-stage turbine type. It is designed for severe and long usage, yet it is compact, very portable, and may be easily handled by one man. Suction at end of 25-foot hose, ⅝" orifice—71 inches of water.

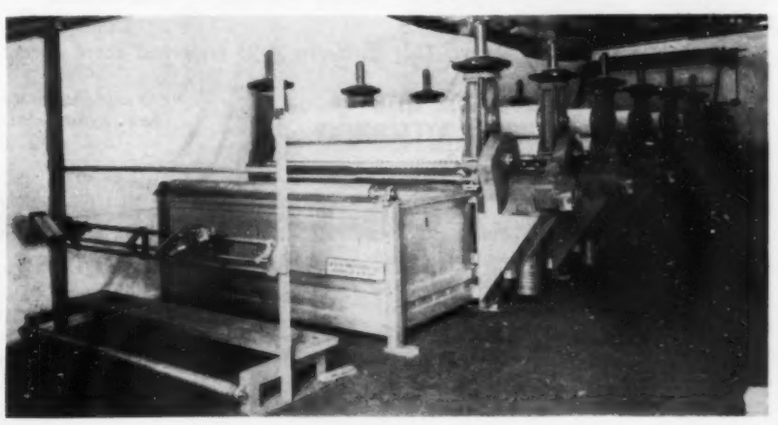
The Model 900 machine is designed for rough, heavy duty service also; however, it is not as powerful. Suction at end of 25-foot hose, ⅝" orifice—51 inches of water.

For congested areas and narrow aisles, the Heavy Duty Portable is the ideal unit, according to the manufacturer. The dust separator assures high efficiency in separation. All dust, dirt and litter collected are

Temperature regulator (Fisher).

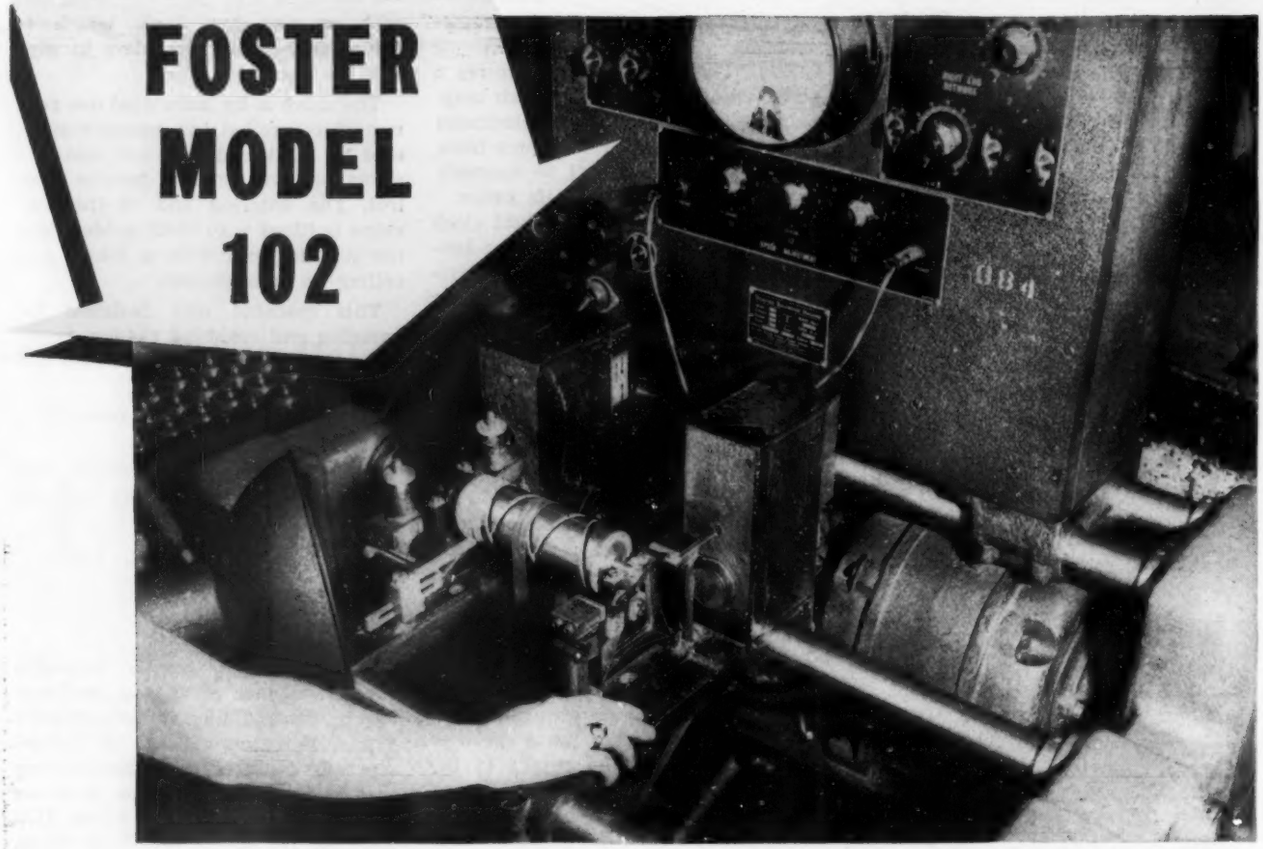


Seven-tank, open width machine for finishing gabardines (Birch).



One Reason Why You Can *Depend* On The

FOSTER MODEL 102



A machine may be perfect in theory and design and yet be a failure, if due care is not exercised in the manufacture of its component parts.

The highest standards of quality have always been maintained by this company in the production of all parts from the largest to the smallest and the production of traversing cams for our Model 102 Winder* is a good example.

After being machined and ground on modern precision equipment these cams are tested for balance on the dynamic balancing machine shown above. This costly and intricate mechanism is electronically operated and indicates immediately if a cam is out of balance and where. No cam, of course, is ever used until it can pass this test.

This is only one of many reasons why you can depend on not only the Model 102, but ALL Foster winders,—to give you high production with low operating cost and minimum outlay for upkeep and repairs.

Our Bulletin A-95 tells you more about the Model 102. It's yours on request.

MODEL 102 WITH CONDITIONING ATTACHMENT

**For winding cotton, mercerized, wool, worsted, merino, spun silk or spun rayon yarns.*

FOSTER MACHINE CO.

WESTFIELD, MASS., U.S.A.

SOUTHERN OFFICE: Johnston Bldg., Charlotte, North Carolina
CANADIAN REPRESENTATIVE:
Ross Whitehead and Company Limited, University Tower Bldg., 660 Ste. Catherine Street, West, Montreal, Quebec
EUROPEAN REPRESENTATIVE: Muschamp Taylor Limited, Manchester, England

deposited in one conveniently and easily removed container. Suction at end of 25-foot hose, 5/8" orifice—41 inches of water.

The Light Portable unit is designed for general cleaning problems. Suction at end of 25-foot hose, 5/8" orifice—46 inches of water.

Invincible Vacuum Cleaner Mfg. Co., Dover, Ohio.

For additional data, request item J-168, using business reply card on page 262. Please specify item.

Satin Finish for Rayon Linings

Development of a satin finish for rayon linings has been announced. The new finish has been pre-tested, and according to officials of the finishing plant, it makes rayon linings look and feel like satin, and gives them nearly all the qualities of a good satin lining.

Newport Finishing Corporation, 160 Fifth Avenue, New York, N. Y.

For additional data, request item J-610, using business reply card on page 262.

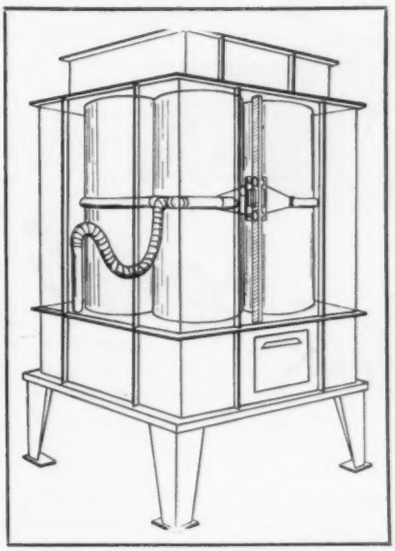
Aeroturn Dust Collector Has New Filtering Material

The Aeroturn Dust Collector for opening and picker rooms features a hard wool felt filter bag that is said to remove the finest dust particles from the air and still does not become clogged by them. The material is very tough, insuring maximum durability and long life.

Another distinctive feature claimed for this dust collector is the method of maintaining effective filtering by the bag at all times. Surrounding the bag is a movable blow ring whose diameter is slightly smaller than the bag diameter, such that the ring will flex the bag while the ring moves from one end of the bag to the other. The inner surface of the ring has a long narrow slot, and air at approximately two pounds pressure passes through the slot from a flexible hose connected to the ring and to a blower driven by a small motor.

This relatively high pressure air in small volume passes from the slot in the ring and through the bag. This concentrated air pressure plus the flexing action of the blow ring movement dislodges the accumulated dust on the inner surface of the bag and causes the dust to drop into the hopper beneath the bag.

Other advantages cited include: substantial savings in heating and humidifying air; reduction of fire hazard; better control of drafts in the picker room, allowing laps to be produced with a minimum of weight variation; automatic operation and cleaning.



Aeroturn dust collector (Whitin).

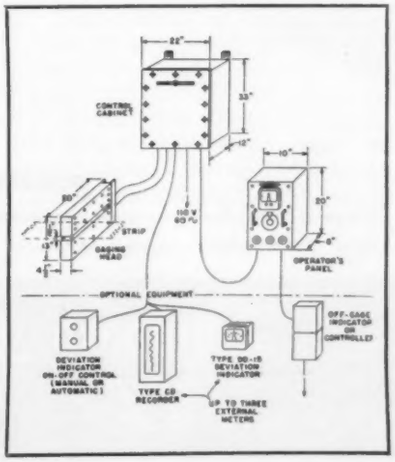
Whitin Machine Works, Whitinsville, Mass.

For additional data, request item J-226, using business reply card on page 262.

Fabric Thickness Measured by Beta-ray Beam

A new non-contacting thickness gauge, utilizing a beta-ray beam, indicates deviations in the thickness of moving sheets of textiles and other materials. No part of the gauge touches the material being tested; it can measure the thickness of material without marking the moving sheet or affecting it in any way. Gauging is done by means of a small beam of beta-rays which passes through the sheet.

Thickness gauge (General Electric).



This beta-ray beam actually weighs a fixed area of the moving sheet of material, and translates the weight into units of thickness. The gauge, which has an accuracy of plus or minus 2%, can be used with materials ranging in weight from 5 to 150 ounces per sq yd.

Three principal units make up the gauge: gauging head, control cabinet, and operator's panel.

General Electric Co., Special Products Division, Schenectady 5, N. Y.

For additional data, request item J-611, using business reply card on page 262.

Portable Electric Impact Wrench

The first of the new line of portable electric impact wrenches for the rapid tightening and removal of nuts, bolts, and cap screws has been announced. The range of this tool is rated at 3/8" thread diameter, and it is known as the 3/8" Impact Wrench.

In tightening operations, the wrench spins a free running fastener to a seating position by high speed direct drive; immediately the clutch throws into operation a rapid, positive hammering action which tightens the fastener with thousands of quick, sharp blows per minute. A few seconds of this positive impacting gives maximum tightness.

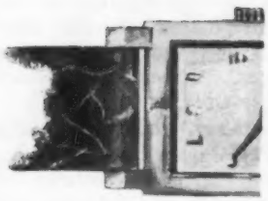
To remove fasteners, the operator merely flips the convenient reversing switch and the impact mechanism hammers the part loose, then spins it off quickly by direct drive. The action and power of the wrench are the same in either direction.

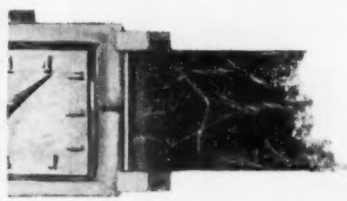
Black & Decker Mfg. Co., Towson 4, Maryland.

For additional data, request item J-124. using business reply card on page 262.

Absolute Pressure Gauge for Extremely Low Ranges

A mechanical-type recording absolute pressure gauge is based on a new principle involving a pressure-sealed lever arm so constructed that it is frictionless, entirely free from lost motion, and free of turning moments due to changes in differential pressure across it. This design makes





more than

CUTS DRYING TIME IN HALF!

. . . AND COSTS, TOO.

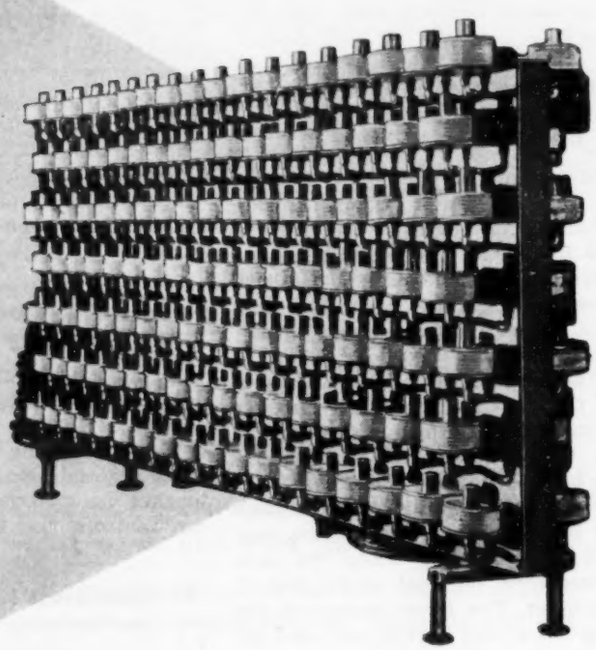
TRADE MARK

Stienen

RAYON CAKE DRYER

Time saver
Space saver
Money saver

That's the exceptionally efficient Stienen Rayon Cake Dryer, made by the leaders in the field – Standard Fabricators, Inc. Yes, it takes the entirely new Stienen Rayon Cake Dryer a fraction of the time –6 to 9 hours–to dry Rayon cakes as compared to others which take much longer. Result – faster turnover of yarn. Less space is required, and that means more production per area. Maintaining the original quality of the yarn, the Stienen Rayon Cake Dryer performs with the greatest of ease in loading and unloading –no cumbersome racks to pull out–push around. Write for further information.



BUILDERS OF

Cotton and wool dyeing machines • for beams • packages • raw stock • skeins • rayon cakes • dye spindles • perforated tubes • centrifugal pumps • extractors and dryers

Standard Fabricators

INCORPORATED

355 Walton Avenue • New York 51, N. Y.

possible the recording of extremely low absolute pressure ranges, it is claimed.

Known as the Series 500 Recording Absolute Pressure Gauge, the instrument is available in ranges from 0 to 20 millimeters mercury up. It is offered as a recorder, an automatic controller, and for remote measurement and automatic control of absolute pressure.

The Bristol Co., Waterbury 91, Conn.

For additional data, request item J-125, using business reply card on page 262.

Counter-Rotating Mixer for Fast Laboratory Mixing

The Counter-Rotating Mixer makes available in the laboratory mixing speeds and results that are reported to be hitherto only available in large production equipment.

By using two motors driving two concentric oppositely rotating shafts, propeller equipped, the mixer produces an annular flow. Thus, all materials, including the heavier particles, are rapidly drawn into the propellers where they must pass through the shearing zone. There is practically no cavitation, no centrifugal effect, and the liquid level remains essentially constant, allowing the use of nearly filled containers, according to the manufacturer.

The mixer allows relative speeds from approximately 200 to 12,000 rpm and provides a continuously variable speed control through a General Radio Variac which is mounted, together with an on-off switch, on the support stand base.

Brookfield Engineering Laboratories, Inc., 4 Porter Street, Stoughton, Mass.

For additional data, request item J-126, using business reply card on page 262.

New Corrugated Box Offers Substantial Savings

Bulk or packaged shipments of bulky materials such as textiles may now be shipped safely at a substantial savings in materials costs and tare weight in a new type corrugated box.

Known as the Belsinger Box, it gets its strength, according to the manufacturer, from its multi-wall construction in which the box can be designed with corrugations running in the desired directions for maximum compression strength; ends, sides, and points of greatest strain of the box are given extra reinforcement.

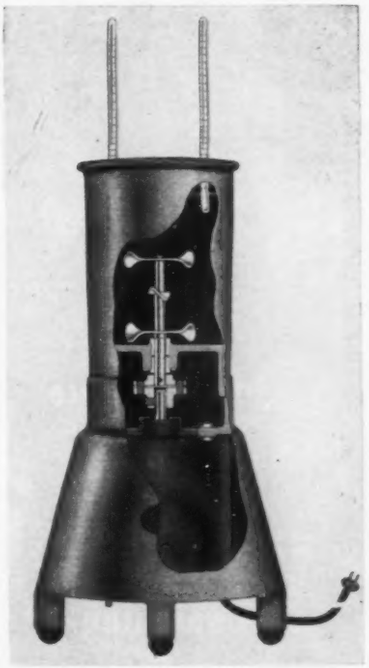
Several models of the box are available, construction varying with the type, size and weight of the product to be shipped.

In addition to freight savings and savings made in the cost of the box, the re-use possibilities of the box further contribute to overall economy.

The Hinde & Dauch Paper Co., Sandusky, Ohio.

For additional data, request item J-165, using business reply card on page 262.

MOISTURE METER



A new method for quick determination of moisture is based on the use of wet and dry bulb thermometers used in connection with harmless chemicals and agitation. The new Master Moisture Meter which employs this method is said to be particularly useful for making quick moisture content determinations of cotton, wool, and other dry materials.

The moisture meter is a heavy duty unit containing an electric motor, material receptacle, agitator vanes and wet and dry bulb thermometers. Determination charts and a liberal supply of chemicals are provided with each instrument.

C. H. Baldwin Co., Lansing, Mich.

For additional data, request item J-612, using business reply card on page 262.

ALUMINUM SADDLE FEATURES SELF-OILING BEARINGS

Self-oiling, long-life bearings are featured in a new line of saddles and cap bar nebs recently developed by Whitehead Engineering Co. of Fairburn, Ga.

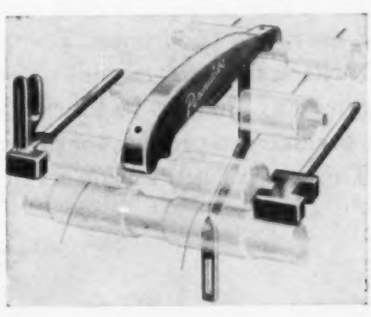
The bearings, made of a cellulose material called "Permalube," are impregnated under high pressure with non-drying capillary oil. Forty-eight per cent of the weight of this material is oil stored up in thousands of tiny capillaries which feed lubricant to the rollers as needed.

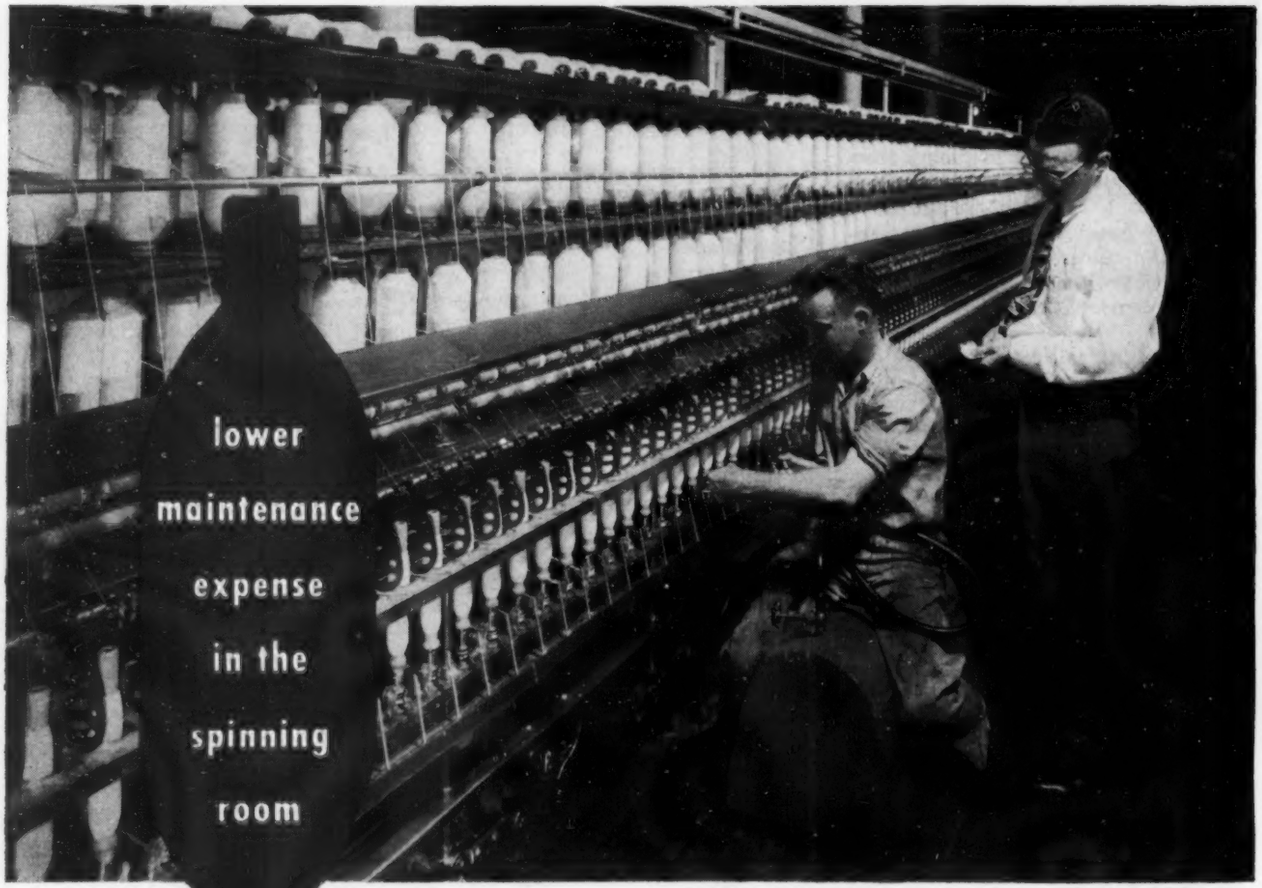
The saddles and nebs are made of aluminum.

According to the manufacturer, the saddle is self-aligning and will not cock or wander. The heat-treated stirrup is permanently adjusted at the factory to fit the specifications of any frame. Ample and positive jack-knifing of the saddle simplifies picking of the rollers.

Meadows Mfg. Co., 1190 Astor Ave., S. W., Atlanta, Ga., agents.

For additional data, request item J-414, using business reply card on page 262.





when the GULF LUBRICATION ENGINEER is "in the picture"

For lower maintenance and power costs in the spinning room—in every mill room—enlist the cooperative services of a Gulf Lubrication Engineer.

With a background of thorough training and broad practical experience, he can be of real assistance to you in improving your lubrication practice.

He will recommend the lubricants and application methods exactly suited to your equipment and operating conditions. Then, periodically, he will check the performance of each machine and suggest any changes in lubrication practice that are necessary to provide for new conditions.

This kind of lubrication service has a real dollar and cents value to you. Write, wire, or phone your nearest Gulf office today and ask the Gulf Lubrication Engineer to call.

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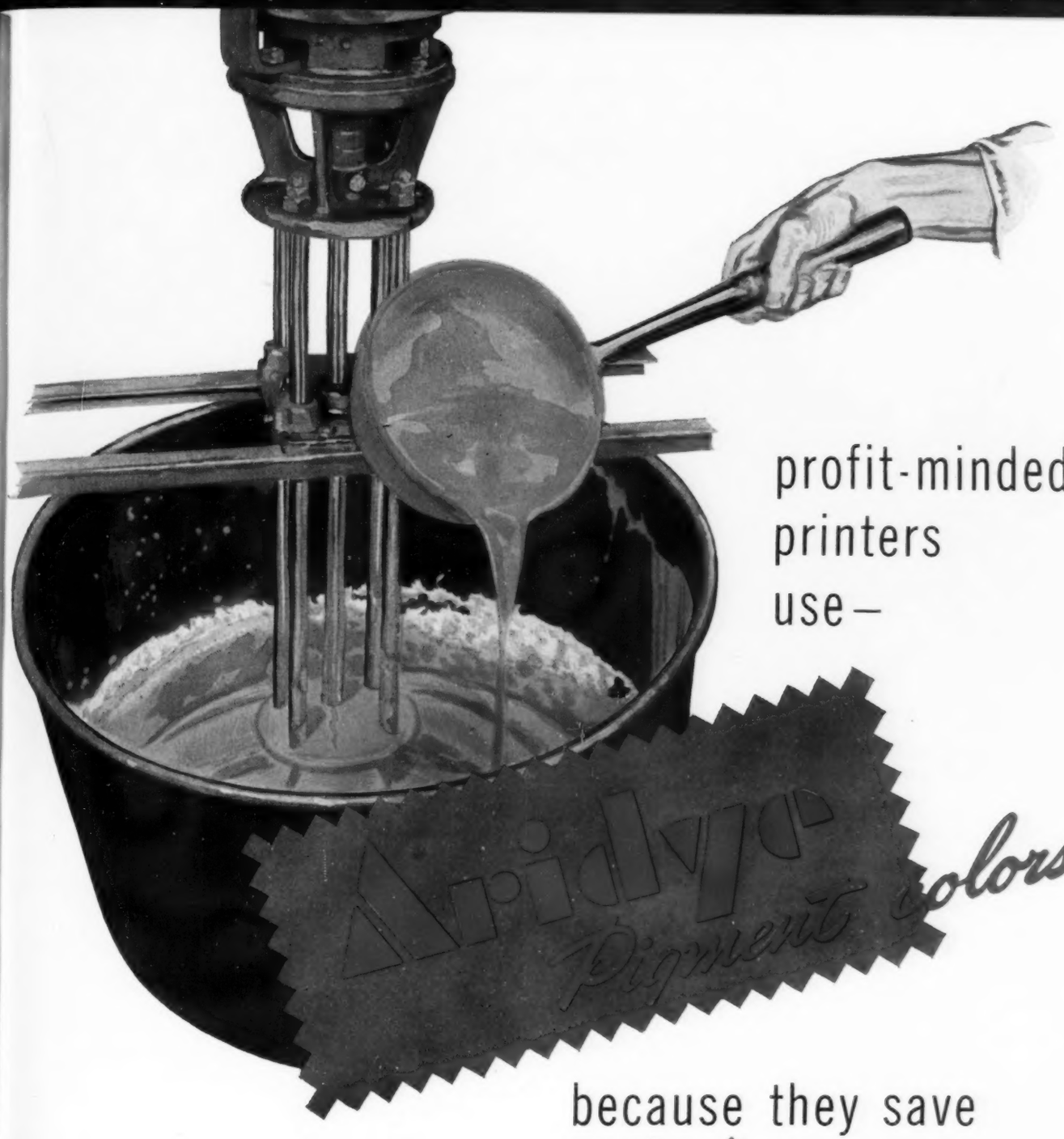
Gulf makes available top quality passenger and truck tires — ask your Gulf representative

GULF INDUSTRIAL LUBRICATION



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6 Ways

1 SAVES on color costs.

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6 SAVES ON COSTLY SECONDS!

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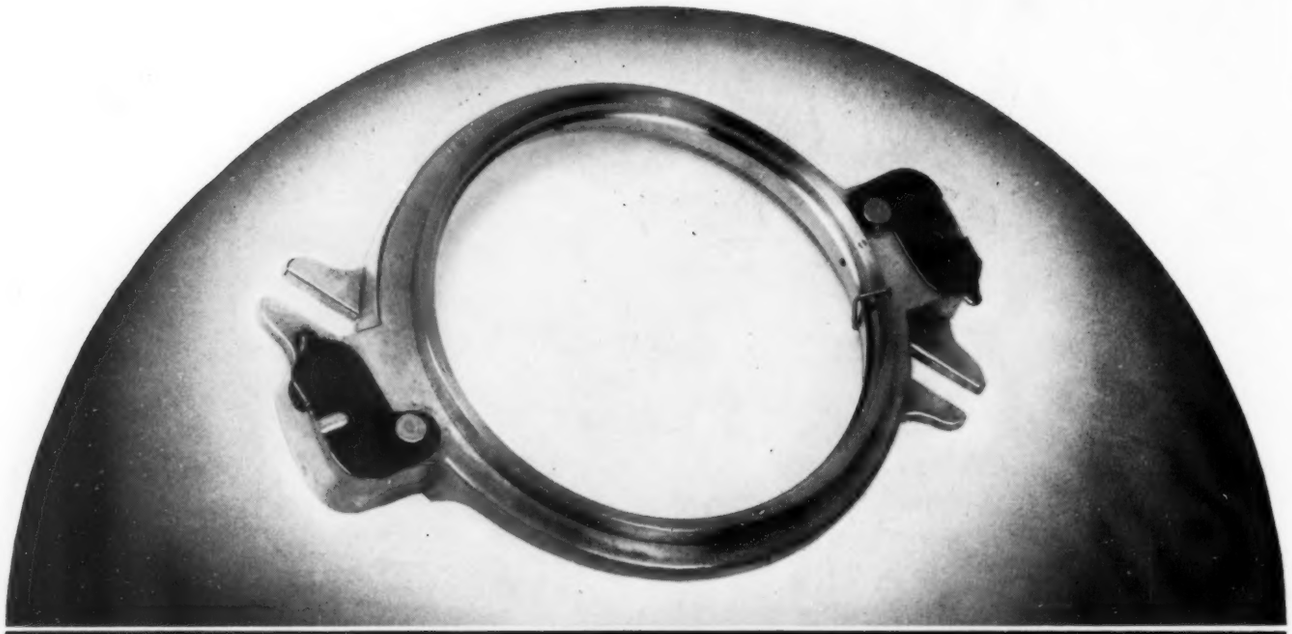
INTERCHEMICAL CORPORATION

TEXTILE COLORS DIVISION

Fair Lawn, N.J. • Rock Hill, S.C. • Pawtucket, R.I.



Only HERR *makes the* "CONICAL RING"

and here is why it is in satisfactory use by the hundreds of thousands thruout the world

1. *Conical* shape produces an outward and downward action with the traveler riding on the top and side face of the ring.

2. Helps reduce yarn breakage and to increase production of higher quality yarn with reduced waste, because the bottom foot of the traveler is kept free to act as a compensating factor to the yarn.

3. Special oil feature provides for absolute control of the flow of oil to the traveler; results in cleaner fabric, minimum oil consumption, longer traveler life, NO rewicking.

4. Constructed of durable drop-forged steel.

5. Mounted in special die-cast holders to accommodate any spinning and twisting rail condition.

TIMELY SUGGESTION

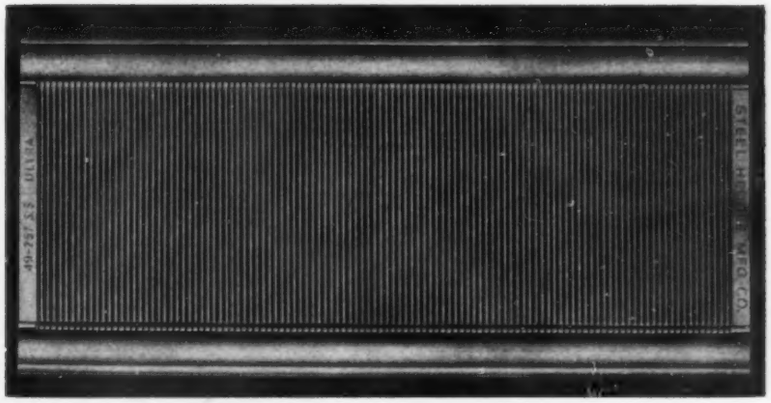
If you have ring problems, let us arrange for one of our representatives to discuss *all* of the merits of the Herr *Conical* Ring.

Used for Quality Spinning and Twisting of Wool, Worsted, Synthetic and Blended Yarns of all types; also Cotton **Twisting.**

HERR MANUFACTURING CO., Inc.

318 FRANKLIN STREET • BUFFALO, NEW YORK

Raw stock extractor (Fletcher).



Stainless steel reed (Steel Heddle).

Removable Extractor Basket Speeds Raw Stock Dyeing

A new extractor has a removable basket which can be removed from the extractor with ease. One outstanding feature of the container is that it has a hinged bottom which can be opened by releasing a catch, thereby permitting instant unloading of dyed raw stock directly into the dryer hopper.

The extractor basket is loaded beside the draining rack and then lifted from the floor and lowered into the extractor. The lid is fastened, and after ten minutes of centrifuging, the machine automatically stops and the basket is lifted out with the aid of the hoist, suspended over the dryer hopper, and the extracted stock is removed from the bottom after the hinged portion is dropped. The cycle is then repeated.

The machine extracts approximately 5500 pounds of stock in eight hours with one operative performing all loading and unloading operations. A time switch controls the time allowed for each extraction and can be adjusted for any period of operation up to one hour.

The normal cycle of operation requires seven and one-half minutes to load the basket and ten minutes to extract the load.

Fletcher Works, Glenwood Ave., Philadelphia 40, Pa.

For additional data, request item J-245, using business reply card on page 262.

New Floor Machine

The new Model C-18 Floor Machine has a brush spread of 18½ inches and is equipped with a ¾ hp motor. The offset motor design counter-balances the handle, thus evenly distributing the weight of the machine and facilitating its operation.

All moving parts are mounted on ball or roller bearings, the motor is dustproof and waterproof, and the two gears run in a continuous bath of grease. The adjustable handle is equipped with a safety switch which can be operated by either or both hands.

Kent Company, 258 Canal Street, Rome, N. Y.

For additional data, request item J-173, using business reply card on page 262.

Fluorescent Lamp Starter Prevents Fires, Cuts Costs

A new electronic safety starter is said to eliminate the danger of fire losses, short circuits and transformer burn-outs in fluorescent lamp fixtures. The safety device reduces repair and maintenance costs because of its excellent performance life, according to the manufacturer. The unit is designed to fit any fluorescent fixture.

Called Automatic Safety No Blink Starter, it is described as a highly efficient thermostatic relay switch. If the starter is called on to light a defective lamp and the lamp does not light within 30 seconds, a highly intricate thermal relay automatically switches off the lamp. Thus the safety feature prolongs the life of the starter, fixture and transformer, stops waste of current, and eliminates possibility of fire, it is claimed.

Suclar Laboratories, Inc., 306 Halsey St., Newark, N. J.

For additional data, request item J-208, using business reply card on page 262.

All-Stainless Steel Reed

All parts used in the manufacture of a recently announced reed are made of rust resisting stainless quality steel, according to the manufacturer. This includes not only the dent wire but also the springs, bands, and ends.

If tube adapters are to be used with the reed, the tubes are also provided in stainless steel so that possibility of contamination of warp from contact with rust is eliminated.

Marketed under the name "Ultra," the reed is reported to be particularly suitable for weaving rayon. The mirror-like finish is said to decrease the possibility of dust collection while in operation.

Steel Heddle Mfg. Co., 2100 W. Allegheny Ave., Philadelphia, Pa.

For additional data, request item J-281, using business reply card on page 262.

Cationic Softener for Rayon Fabrics

Arquad 2HT is a secondary quaternary ammonium salt especially useful as a cationic softener for rayon fabrics. This oil-soluble secondary Arquad is dispersible in water, soluble in naptha, most hydrocarbons and a variety of other organic solvents.

It is compatible with cationic and non-ionic materials although it is not compatible with anionic materials such as soaps or the common anionic synthetic detergents. Arquad 2HT is stable at both high and low pH and in the presence of most water-soluble salts. It is not precipitated by hard water.

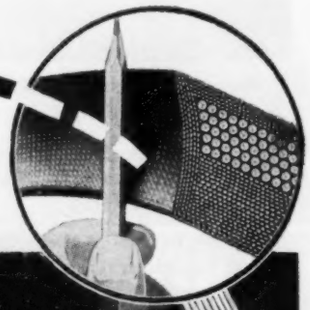
Arquad 2HT is highly concentrated —75% active. A small concentration in the final bath gives cloth a fine

You can actually *feel* the sides of a belt *change shape* as the belt bends.

In Two Minutes You Can See Exactly How . . .

The Concave Side

(U.S. Patent No. 1813698)



SAVES Your Transmission DOLLARS

Take *any* V-belt in your hands and bend it as it bends in going around a pulley. You will see that the top of the belt, being under *tension,* grows *narrower.* The body, under compression, *widens.* The sides *bulge out.*

This shape change—in a *straight-sided* V-belt—is shown in Figures 1 and 1-A, below.

Straight-Sided V-Belt

How Straight-Sided V-Belt Bulges in Sheave-Groove.

Now look at Figures 2 and 2-A. There you see how the *same shape change* affects the V-belt built with the precisely engineered *Concave Side* (U.S. Patent No. 1813698).

Gates Vulco Rope with Concave Side.

No Side Bulge. Precise Fit in Sheave Groove.

The top of the belt narrows, the body widens. But the sides *merely straighten—and* the new shape *exactly fits* the sheave groove!

Two savings result. (1) Uniform side-wall wear *—longer life!* (2) Full side-wall grip on the pulley carries heavier loads and *sudden load increases* without slipping; saves belts, saves *power!*

®REG. U. S. PAT. OFF.

The Mark of SPECIALIZED Research

The Concave Side is *MORE IMPORTANT NOW Than Ever Before*

Because the sides of a V-Belt are what actually drive the pulley, it is clear that any increased load on the belt means a heavier load that must be transmitted to the pulley directly through the belt's sidewalls.

Now that Gates SPECIALIZED Research has made available to you SUPER Vulco Ropes—carrying fully 40% higher horsepower ratings—the life-prolonging Concave Side is naturally more important in conserving belt life today than ever before.

4910

GATES VULCO ROPE DRIVES

Engineering Offices and Jobber Stocks IN ALL INDUSTRIAL CENTERS of the U. S. and 71 Foreign Countries

THE GATES RUBBER COMPANY
DENVER, U.S.A.
The World's Largest Makers of V-Belts

"hand," it is claimed. The product is considered excellent for its non-yellowing properties.

Armour and Company, Chemical Division, 1355 West 31st Street, Chicago 9, Ill.

For additional data, request item J-110, using business reply card on page 262.

Condensation Return Unit For Low Pressure Jobs

A line of simplex and duplex square tank condensation return units is equipped with turbine-type pumps. Ability for efficiently handling small capacities and high temperature liquids without vapor bind, provision being made for expansion and contraction due to different liquid temperatures, are features of these units.

Aurora Pump Co., 190 Loucks Street, Aurora, Illinois.

For additional data, request item J-109, using business reply card on page 262.

Smoke Detector Polices Several Plant Areas

The Multi-Space Smoke Detector is intended for early fire detection in unfrequented plant areas, vaults, or warehouses, where fire may smoulder and produce smoke long before flames actually break out and produce enough heat to actuate other types of protective devices. It will protect four spaces simultaneously.

There are two main units comprising the device—control cabinet and analyzer tube.

In each protected area or zone, one or more accumulators are installed at the ceiling. These accumulators are connected to rigid piping that leads to the control cabinet, preferably located at some point central to the protected areas.

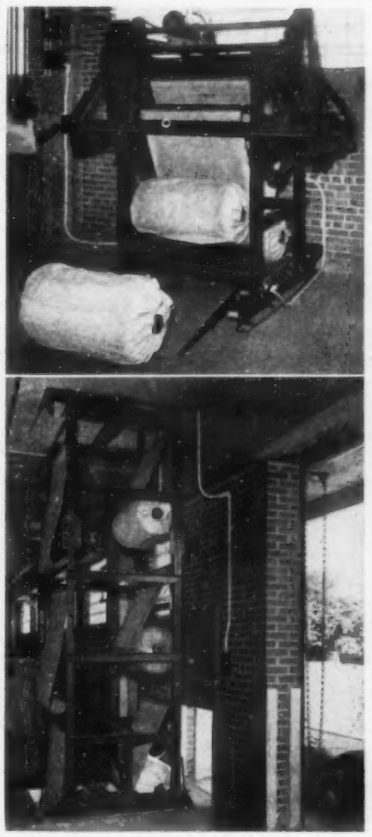
The analyzer tube is mounted near the control cabinet and is connected to it electrically and by piping. Fire alarm and trouble signals or bells may be located at one or more points where someone is on constant duty. A remote indicator designating the exact space from which an alarm originates can also be supplied.

All accumulators in all spaces are under constant suction, drawing continuous streams of sampling air to the control cabinet. The selector valve mechanism directs the air from each space in succession through the photo-electric analyzer tube, where each space is sampled for 10 seconds.

If 3 per cent or more smoke is present in any air sample, the valving mechanism stops and the fire alarm rings. The numbered zone wheel, visible through a window in the control cabinet door, indicates the space from which the alarm originates. The remote indicator tells the exact location where smoke is present. Concentrations of smoke lower than 3 per cent set off a trouble alarm, which changes into fire alarm as smoke density increases.

Walter Kidde & Co., Inc., 490 Main St., Belleville 9, N. J.

For additional data, request item J-176, using business reply card on page 262.



VERTICAL CHAIN CONVEYOR

Shown here is a Four-Corner Post, Two-Strand Vertical Chain Conveyor with the canvas slings for conveying rolls of cloth from one floor to another. The rolls are manually loaded and are automatically discharged when used in either direction. This conveyor is designed for reversible service with commodities weighting approximately 200 pounds each. The canvas slings can be easily replaced.

Various electrical safety devices are coupled in with the conveyor to prevent operation if the proper ramp and stations are not in the correct position for operation.

Standard Conveyor Co., North St. Paul 9, Minn.

For additional data, request item J-429, using business reply card on page 262.

New Era Spinning Spindle

The New Era spindle is a departure from conventional spindle design since the central shaft or blade is stationary, securely fastened to the spindle rail, held in a position central with the ring by means of a simple anchorage which serves as a means of dampening out any vibration and also functions as a device which makes "plumbing" a simple and easily accomplished operation.

The distinguishing feature claimed for the spindle is the support of the load between two bearings which not only effects an improvement in the running characteristics, but makes it possible to plumb this spindle while it is motionless. Another feature of the spindle is the fact that the yarn carrier is a tube. No oil is required.

Saco-Lowell Shops, 60 Batterymarch St., Boston 10, Mass.

For additional data, request item J-262, using business reply card on page 262.

Electric Controls for Textile Machinery

An electronic device, known as the VSS Short-Stroke Dancer Roll is designed to meet two distinct speed control problems commonly associated with various types of continuous industrial process operations. It provides control tension for loops of material in process and control of motor speed in proportion to the position of some object or mechanism. Applications for which the VSS is designed include plastic coating, textile finishing, etc.

The VSC Electronic Excitation Control System provides functional adaptabiilty for production or processing operations requiring timed-rate, smooth acceleration and deceleration. Textile applications already developed for the control include slitters, winders, and slashers. Used with a conventional variable-voltage motor-generator set, the VSC pro-

TEXTILE MACHINERY and

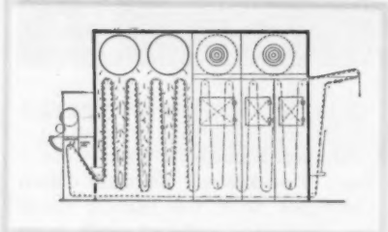
PUBLISHED BI-MONTHLY FOR TEXTILE MILL EXECUTIVES AND OPERATING PERSONNEL BY PROCTOR & SCHWARTZ, INC.

• OCTOBER • 1949 •

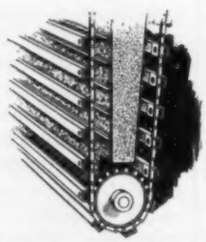
"Airlay" Feature of Proctor Multipass Dryer Promotes Rapid, Uniform Tensionless Drying

For achieving the ultimate in the finished appearance of goods that are to be dried without tension, many mills are finding the Proctor Multipass "Airlay" Dryer to be ideall suited.

It is from the machine's basic principle of design that it derives the name "airlay"—and it is this principle that accounts for the superior results that are being achieved.



The material to be dried is carried through the machine on a conveyor equipped with cork-faced supporting girts. This conveyor (illustrated by close-up drawing), travels upward and downward in a series of U's, as can be seen from the side elevation. The material is held gently and evenly against the girts by the pressure differential between adjacent air chambers. The air thereby serves the double purpose of drying the material and helping to carry it. It assures a uniform distribution of air over all of the material, resulting in extremely rapid drying. When material is fed into the dryer without wrinkles or creases, it will come out in the same manner.



Since neither the machine nor the principle is drastically new—it is well beyond the theory stage. It has a proven performance record in many textile mills who have found it to be the answer to rapid, uniform, tensionless drying for quality fabrics.

CURRENT ARTICLE ON BLENDING AVAILABLE

During the summer, John H. Senior, a Vice President of Proctor & Schwartz, Inc. and one of the leading men behind the development of modern blending systems, prepared an article on the subject of blending for one of the textile magazines.

The article is comprehensive and traces the development of the blending of textile fibres from its early beginnings up to the present. The theory, practice, and machinery used for fibre blending, are clearly set forth by a man who has been largely responsible for the growth of this comparatively recent development in the industry.

Because of the wide interest in this subject, we've had reprints made of this article which are available upon request. Write for "Fibre Blending" by John H. Senior.

PROCTOR RESEARCH KEEPS ABREAST OF DEVELOPMENTS IN CURING

Proctor engineers, who pioneered much of the equipment that is today in wide use for curing resin treated fabrics, are keeping up-to-date on current practices in this field through constant touch with mills where Proctor curers are in operation.

In current operation are two basic types of Proctor equipment for curing. The Proctor Loop Curer offers high capacity, while the Proctor Roller Curer is used for more moderate output requirements.

Each machine is recommended only after a careful study of individual mill and fabric requirements. Because of Proctor & Schwartz long association with the design of equipment for this purpose and their close cooperation with textile technologists, they are in an excellent position to make recommendations for your needs.

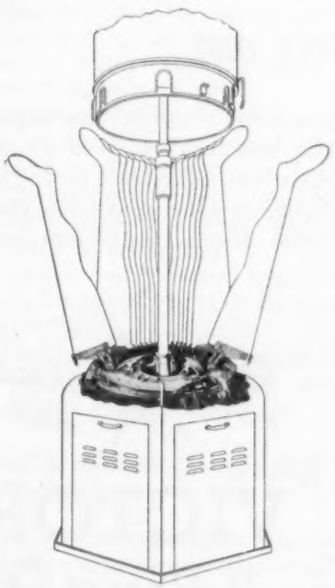
DRYING EQUIPMENT *News*

MECHANICAL IMPROVEMENTS IN PREBOARDING EQUIPMENT CONTINUE TO ATTRACT ATTENTION

The mechanical improvements made in the re-design of the Proctor preboarding machine several months ago—and first shown to a large audience at the Knitting Arts Exhibition early this Spring—are still continuing to attract the attention of hosiery men throughout the industry.

These improvements include a changeover from a hydraulic piston arrangement for raising and lowering the boards to a cam which operates mechanically, illustrated below . . . and the addition of the dual-board take out device. By means of the latter, boards are brought out individually and continuously at the two boarding positions on the machine. Wear and maintenance are cut to a minimum.

Write for details.



Development Continues As Applications Increase for Automatic Stock Conveying

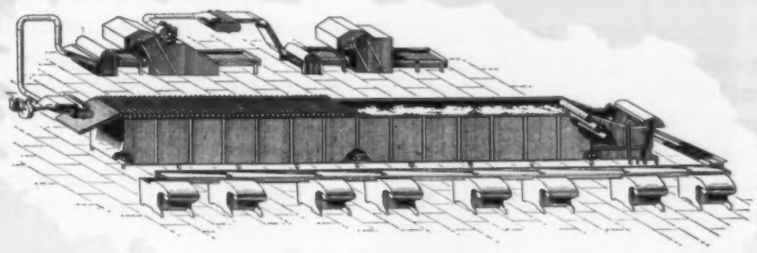
Recent months have seen many developments in Proctor automatic stock conveying systems. These developments have come about as applications for these modern stock conveying systems have been made in many types and sizes of textile mills.

There is nothing static about the possibilities of automatic stock transfer. The basic principles remain essentially the same but the arrangement and type of equipment used, varies with the individual mill problem. The end results are always the same. The systems automatically deliver stock where it is required, when needed and in the quantity desired. Wherever these systems have been installed, labor requirements have been reduced to an absolute minimum and all of the guesswork and expense of hand feeding have been eliminated.

Stock may be put through a variety of preliminary blending operations from which it is ultimately conveyed overhead to a spot above either card hoppers or storage bins. In the system illustrated, component stocks are put through two pickerings and then given a final blend in a roller distributor with a magazine hopper. The completely blended mass of stock is then automatically fed from the roller distributor to an overhead conveyor which transfers it to a patented series of short overlapping conveyors, each equipped with its own reversible motor drive. The entire system is controlled by electrical switches tied in with feeler mechanisms on the card hoppers. When all of the hoppers are filled, the system ceases to operate and also shuts off preliminary equipment. As soon as any hopper requires more stock, the system automatically resumes operation.

Variations of the basic principles are being made all of the time. If you have a stock conveying problem—let Proctor engineers study it with you and suggest a system that will be "job engineered" to your requirements and the amount of money you are prepared to invest.

Much Proctor drying equipment and textile machinery is covered in full or in part by patents or patents pending.



Proctor & Schwartz, Inc. 610 TABOR ROAD *Philadelphia 20, Pa.*

WHEN YOU ARE IN THE MIDDLE...

here's a man who can help you out

WHEN you are in the middle—between bad-running spinning or twisting and a management that is pressing for better production and quality—it's a good time to talk to a Victor Service Engineer.

He has been in on thousands of spinning and twisting problems, and seen them through to a successful solution. He can not only recommend the right traveler for the job, but can often make other suggestions for improving yarn quality and production that will change front office complaints to compliments.

Now, in the face of increasing competition for peacetime markets, you need his resourceful cooperation—the friendly, result-getting Victor service that has made Victor Travelers standard for over 8,000,000 spindles of spinning and twisting throughout the industry.

New fibers, new blends that increase your problems are seldom new to the Victor Service Engineer. You find him ready to share his important information on any fiber. Write, wire or phone the nearest Victor office . . . for prompt service.

•

Keep a Step ahead with

VICTOR Ring Travelers

VICTOR RING TRAVELER COMPANY

PROVIDENCE, R. I. . . . 20 Mathewson St. . . . . Tel. Dexter 1-0737

GASTONIA, N. C. . . . 358-364 West Main Ave. . . . Tel. Gastonia 5-0891

vides the basic functions of excitation, pre-set speed with controlled definite time acceleration and deceleration, combined voltage and field control with full motor field control when operating in the voltage control range. Either dynamic or regenerative braking can be incorporated.

A recently developed rotating regulator for voltage and current (tension) regulation has found application in the textile industry. Known as the VSA Regulator, the unit consists of two exciters, driven by a small a-c motor, which perform the functions of recognizing a signal change and amplifying it into usable d-c power for the required speed correction of a motor drive.

Reliance Electric & Engineering Co., 1111 Ivanhoe Rd., Cleveland 10, Ohio.

For additional data, request item J-201, using business reply card on page 262. Please specify item.

Commonwealth Develops Four Chemical Specialties

Four chemical specialties have been developed by one manufacturer during the past year.

Comco Resin M P is a polymerized synthetic resin. It is easy to apply and no special curing or baking is required. Excellent resistance to laundering and dry cleaning is reported when this product is used.

Nilaton Finish R is a new synthetic resin for finishing nylon hosiery. According to the manufacturer, it imparts exceptional full body and snag resistance to hose.

Nilaton Duller is an effective duller especially recommended for 15 denier monofilament nylon hosiery.

Comcoterg is a new anionic synthetic detergent with an alkyl aryl sulphonate base.

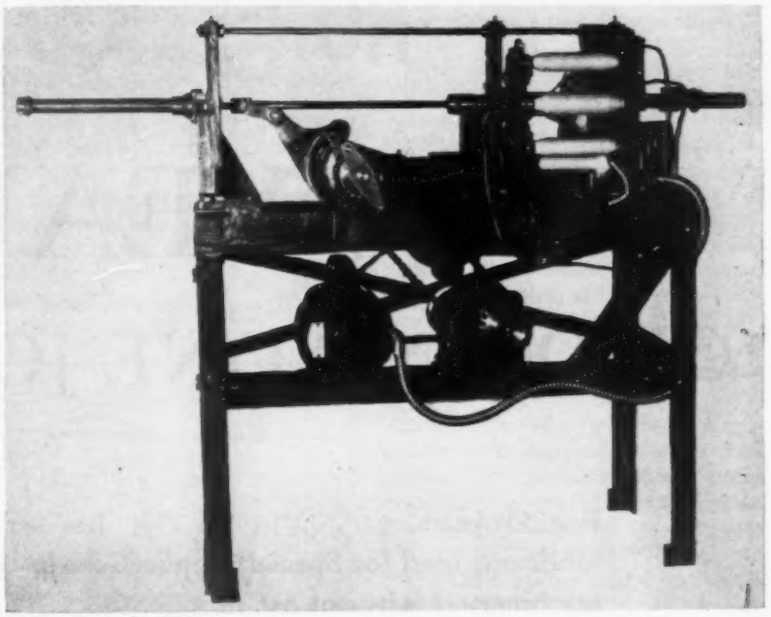
Commonwealth Color & Chemical Co., Nevins, Butler and Baltic Sts., Brooklyn, N. Y.

For additional data, request item J-135, using business reply card on page 262. Please specify item.

Warp Bobbin Stripping Machine

A new Warp Bobbin Stripping Machine is said to strip all the yarn from any type warp bobbin from tails to full wound bobbins without cutting or damaging the wood or any material the bobbin may be made from.

The operator drops the bobbin between two rotating plates, one end of the bobbin fitting a holder block in one plate, and the other end fitting into a half-round cut in the rim of the other plate. Both plates are securely tied together with a central adjustable rectangular clamping shaft, which drives both discs in unison to the various stations in the stripping cycle. Once the bobbin starts on its stripping cycle, it is fully controlled by the machine itself.



Warp bobbin stripping machine (Production Engineers).

The bobbin is rotated to five automatic stopping stations in its cycle, where various operations take place. In the first station an air jet cleans the interior of the bobbin of all threads and lint. The second station brings the yarn on the bobbin up against a bobbin turning device. When the bobbin is driven from the second to the third station, the bobbin is rotated into an angularly fixed sloughing knife underneath, with an angular spring loaded plow directly opposite and above. The knife and plow remove about three inches of yarn laterally from the neck of the bobbin, leaving only a very thin layer of threads to be stripped from this section of the bobbin. This waste drops to the top of the platen where it is blown by air down the chute to the waste box.

Other steps complete removal of

NO FLICKER OF THE POINTER

This redesigned Tensometer has a dampening device that eliminates sudden fluctuations of the pointer that sometimes occur when taking readings.

The new instrument also has a knurled case to prevent its slipping out of the users' hand accidently.

Sipp-Eastwood Corp., Paterson, N. J.

For additional data, request item J-428, using business reply card on page 262.

TRADE MARK REGISTERED

NON-FLUID OIL

IN U.S. PAT. OFFICE & FOREIGN COUNTRIES

53 YEARS

OF DOING ONE JOB WELL....

For 53 years, NON-FLUID OIL has set the standard for all lubricants used for Special* applications in the operation of textile machinery. Universal use of NON-FLUID OIL has set the pace for the imitations which have served only to emphasize the importance of the use of this most effective lubricant.

Constantly—We are told by our customers about the superiority of NON-FLUID OIL over oils and grease-filled oils and mixtures. Occasionally we have brazen requests from lubricant vendors for samples of our material, and their admission that they want them for purpose of duplication.

Fifty-three years have gone by and there has never been a long-lived imitation of NON-FLUID OIL. We anticipate that 53 years more will expire with no change in this situation.

***—Comb boxes, doffer, cylinder and lickerin bearings, all roll necks of carding and spinning, and for general application on all models and makes of looms.**

NEW YORK & NEW JERSEY LUBRICANT CO.

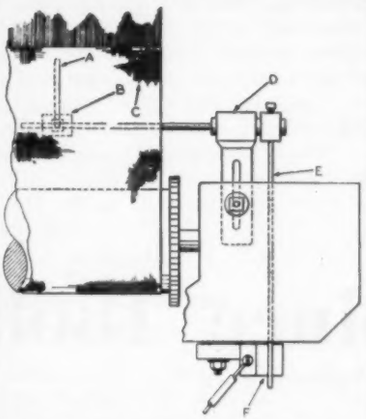
292 Madison Avenue, New York, N. Y.

Southern District Manager: FALLS L. THOMASON, Charlotte, N. C.

WORKS: Newark, N. J.

WAREHOUSES: Atlanta, Ga.—Greenville, S. C.—Charlotte, N. C.—Providence, R. I.—Chicago, Ill.—St. Louis, Mo.—Detroit, Mich.

NON-FLUID OIL is not the name of a general class of lubricants, but is a specific product of our manufacture. So-called grease imitations of NON-FLUID OIL often prove dangerous and costly to use.



THIN PLACE DETECTOR

A new thin place detector operates from the battery end of the loom. Detector finger (A) is in contact with the underside of cloth (C). The rotatable detector finger shaft (B) is mounted in bearing of loom attached adjustable bracket (D).

A connecting rod (E) fastened by set screw to the bracket end of detector finger shaft acts as a counterbalancing weight for the detector finger. The opposing end of the connecting rod establishes electrical contact with the solenoidal loom knock-off circuit (F).

When a thin place occurs, the detector finger rises and rotates the detector finger shaft, thereby depressing the connecting rod and actuating the knock-off circuit.

Bahan Textile Machinery Co. Greenville, S. C.

For additional data, request item J-433, using business reply card on page 262.

the yarn without damaging the bobbin.

The machine is rated at 35 bobbins per minute, or 16,000 bobbins per 8 hours.

Production Engineers Co., 306 Stuart St., Boston, Mass.

For additional data, request item J-613, using business reply card on page 262.

New Microscope Has Interesting Features

A new series of microscopes incorporates many interesting features.

The stand of the new Spencer microscopes is made of aluminum. A new attached illuminator, optional with these microscopes, provides permanently adjusted illumination that fills the field of all objectives from the low power "finder" to the oil immersion without refocusing the condenser.

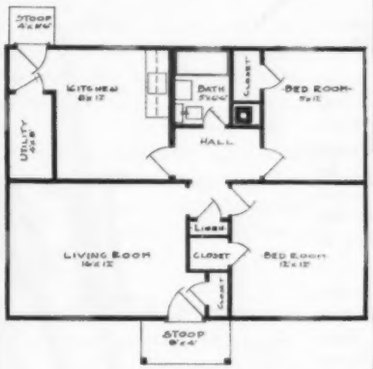
The fork-type substage is larger, sturdier, and has new locking and keying devices. A new tension adjustment makes it possible to set coarse focusing and substage controls for as easy or as stiff operation as desired.

Ball bearing ways reduce friction in the fine adjustment.

A new "pinch grip" mechanical stage permits rapid insertion of slides without danger of disturbing mechanical adjustments. A completely new 10X divisible objective is supplied. It has an N. A. of .25, working distance increased to 6.8 mm, and improved color correction.

American Optical Co., Southbridge, Mass.

For additional data, request item J-113, using business reply card on page 262.



PREFABRICATED MILL HOUSING

Four- and six-room Knox Economy Homes are especially suited for mill housing. These homes are shipped to the building site in panelized sections along with all materials to complete the carpentry work.

A four-room house has been erected with as little as 326 man hours expended, and the house was ready for occupancy with the exception of floor finishing and interior painting and decorating.

Knox Corporation, Thomson, Ga.

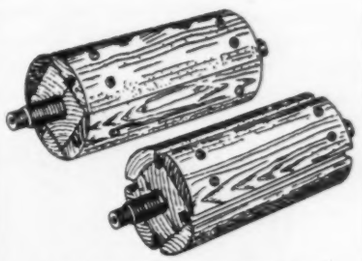
For additional data, request item J-424, using business reply card on page 262.

Dry Type Lint Collector

Now on the market is a dry type lint collector called the Airmat Lint Arrester, for lint and dust control in textile mills. By cleaning the air exhausted from picking, opening, and similar machines, it eliminates the lint nuisance common to mills and surrounding neighborhoods and also permits recirculation of the cleaned air to the workroom, thereby conserving heat. Recirculation also makes humidity control and air conditioning feasible for the opening and picking rooms.

The lint arrester is built of standardized units composed of six pockets holding two sheets of Airmat paper supported on woven wire panels. Airmat is a laminated cellulose material made from spruce fibers.

The units are assembled to form a partition in the air stream between the dirty air inlets and the clean air return. Dust and lint-laden air passes through the pockets where cleaning



LOOM BEAM BARRELS

These heavy duty barrels are made of kiln-dried hardwoods which keep splitting and splintering to a minimum. The solid cold rolled steel shaft runs completely through the barrel, and journals are accurately machined to the user's specifications. Since the barrel is bolted to the shaft, the tendency to work loose is eliminated.

Staybolt grooves may be furnished open or concealed; number and size to specifications. Spline grove is optional.

The barrels are sanded smooth and are finished with three coats of shellac and varnish.

Woodbury Box Company, Woodbury, Georgia.

For additional data, request item J-431, using business reply card on page 262.

WICACO QUALITY Since 1868

This Is Our 81st Anniversary

SPINDLE OILING MACHINE

THE Wicaco Spindle Oiling Machine guarantees proper lubrication for Twisting Spindles, reducing operating costs and giving them longer life. It flushes out the old oil and replaces it with fresh oil in one simple operation. It saves time, labor and power, and guarantees proper oil level at all times.

This efficient machine is used successfully in many mills producing Wool, Cotton, Silk and Rayon. Many textile mills where one was installed have bought additional machines to completely service all their spindles. Order yours today, or send for descriptive folder NOW.

ROLLER BEARING SPINDLES

WE manufacture Textile Spindles of all descriptions for Rayon, Silk, Wool and Cotton. We first introduced Roller Bearing Spindles to the Textile Industry in 1935, incorporating the SKF Roller Bearing type of bolster. Since then we have designed and manufactured many types of spindles for the Textile Industry.

Replace your present spindles, regardless of type, with efficient Wicaco Roller Bearing Spindles to reduce operating costs and increase production. We will design them to meet your particular requirements. Write today for quotations.

Our ENGINEERING DEPARTMENT invites you to consult with them on any problem.

WICACO MACHINE CORPORATION

Designers and Engineers

WAYNE JUNCTION PHILADELPHIA 44, PA.

Precision
MACHINE PARTS
RAYON EQUIPMENT
TEXTILE SPINDLES
WICACO SPINDLE
OILING MACHINE

— OUR AGENTS —
AMERICAN SUPPLY COMPANY
78 Fountain Street, Providence, R. I.
OTHER AGENTS IN FOREIGN COUNTRIES

is obtained by the filtering media. Settling chambers, or dust basements, of the size normally used in textile mills are no longer essential with the installation of this lint arrester.

American Air Filter Co., Inc., 215 Central Ave., Louisville, Ky.

For additional data, request item J-232, using business reply card on page 262.

Welded Stainless Batch Cans

Stainless steel batch cans made of Type 304 stainless steel feature butt welded construction by the Heliarc process, using no filler rod or flux.

They are reinforced at top by an endless iron ring, with handles attached and with iron chime; metal flanged out over edge of top band and for ¼" down on outside. Bottoms are reinforced by an iron cross welded to the chime. Cans are available from stock in 10 to 75 gal. sizes, with or without covers.

Metalsmiths, Division of Orange Roller Bearing Co., Inc., 560 White St., Orange, N. J.

For additional data, request item J-187, using business reply card on page 262.

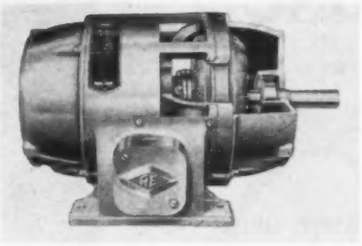
Fluid-Shaft Electric Motors Have Many Applications

A new development in electric motor design has been announced. The new unit is called Fluid-Shaft Motor and features a single frame, integral design of motor and fluid-drive coupling.

Savings in both original cost and mounting area are claimed for the fluid drive units. These motors are particularly suitable wherever loads require smooth acceleration, protection from "jamming" and shocks, or are difficult to start. Typical of these installations are conveyors, extractors, etc.

Other advantages of the motors are as follows: There is no need to overmotor—loads that are tough to bring up to speed, even with special motors, are accelerated easily with Fluid-Shafts, because the motor is practically up to speed before any load is applied; for this reason it is possible to use motors which can be selected closer to actual horsepower requirements.

A definite saving in power is accomplished because of a considerable reduction in starting current. All starting and operating shocks are absorbed in a cushion of oil. Available in standard foot mounted or



Fluid-shaft motor (Reuland).

round body frames, all units can be mounted horizontally or vertically, or with NEMA flange and face type end bells. No special engineering is required for installation. The units are available in sizes from ½ to 10 hp.

Reuland Electric Co., Alhambra, California.

For additional data, request item J-200, using business reply card on page 262.

High Speed Drying and Curing Range

A recently developed system for drying and curing latex backing on carpets incorporates gas infra-red generators as the source of convected and radiant heat, and large volume fans with high velocity air jets as the means of impinging air, at velocities in excess of 2000 feet per minute, against the top and bottom of the carpets.

A stainless steel balanced spiral conveyor, 7 feet wide x 100 feet long and powered by a 4 feet to 28 feet per minute variable speed drive, conveys the carpets through a two-zoned 50-foot insulated oven.

The drying and curing zones are each equipped with a 7-foot gas infra-red generator facing down, and four air-cooled, large volume fans, two above the conveyor belt and two below. Both zones have separate exhaust systems for removing saturated air and volatiles, and indicating temperature controllers for maintaining uniform heat throughout the oven.

A "Premix" air-gas combustion system is used for supplying fuel to the gas infra-red generators which burn manufactured, natural, propane, butane or vaporfied gases.

Safeguarding controls are installed on both the oven and conveyor.

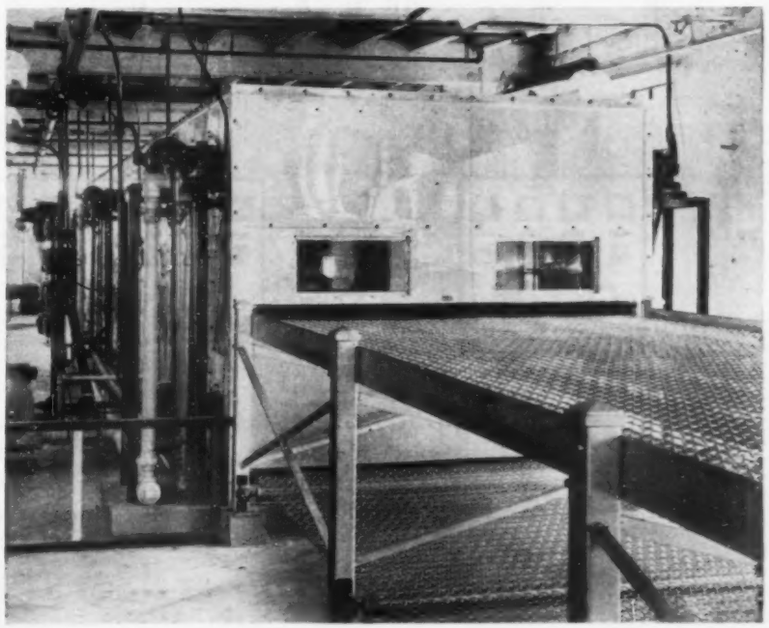
The range was designed to produce from 4,000 square feet of carpet per hour with a heavy latex spray to 10,000 square feet per hour with a light spray. The drying and curing cycle varies from 2 to 5 minutes, depending on the latex application.

Although the range was primarily designed for the carpet industry, it lends itself readily to other drying, baking and curing applications.

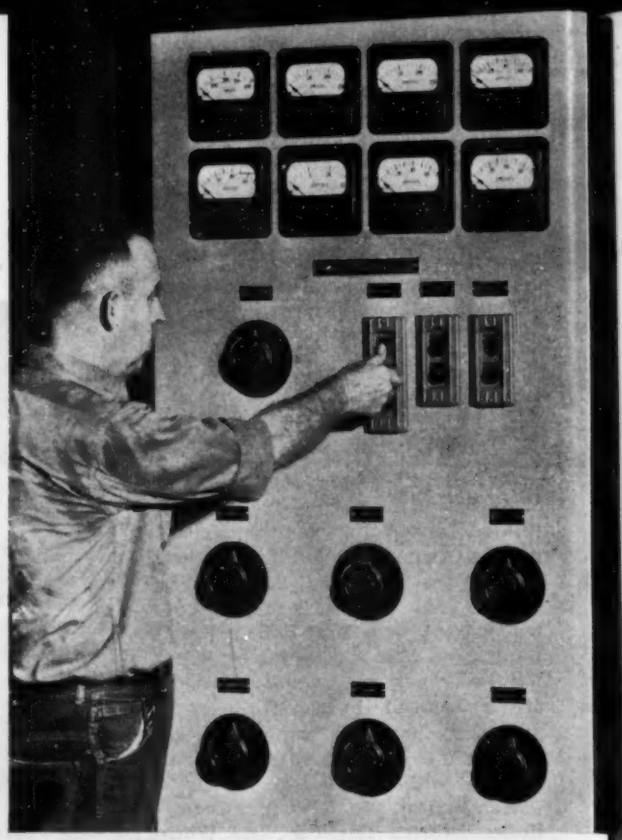
Process Heating, Inc., 46 Herkimer Place, Brooklyn 16, N. Y.

For additional data, request item J-614, using business reply card on page 262.

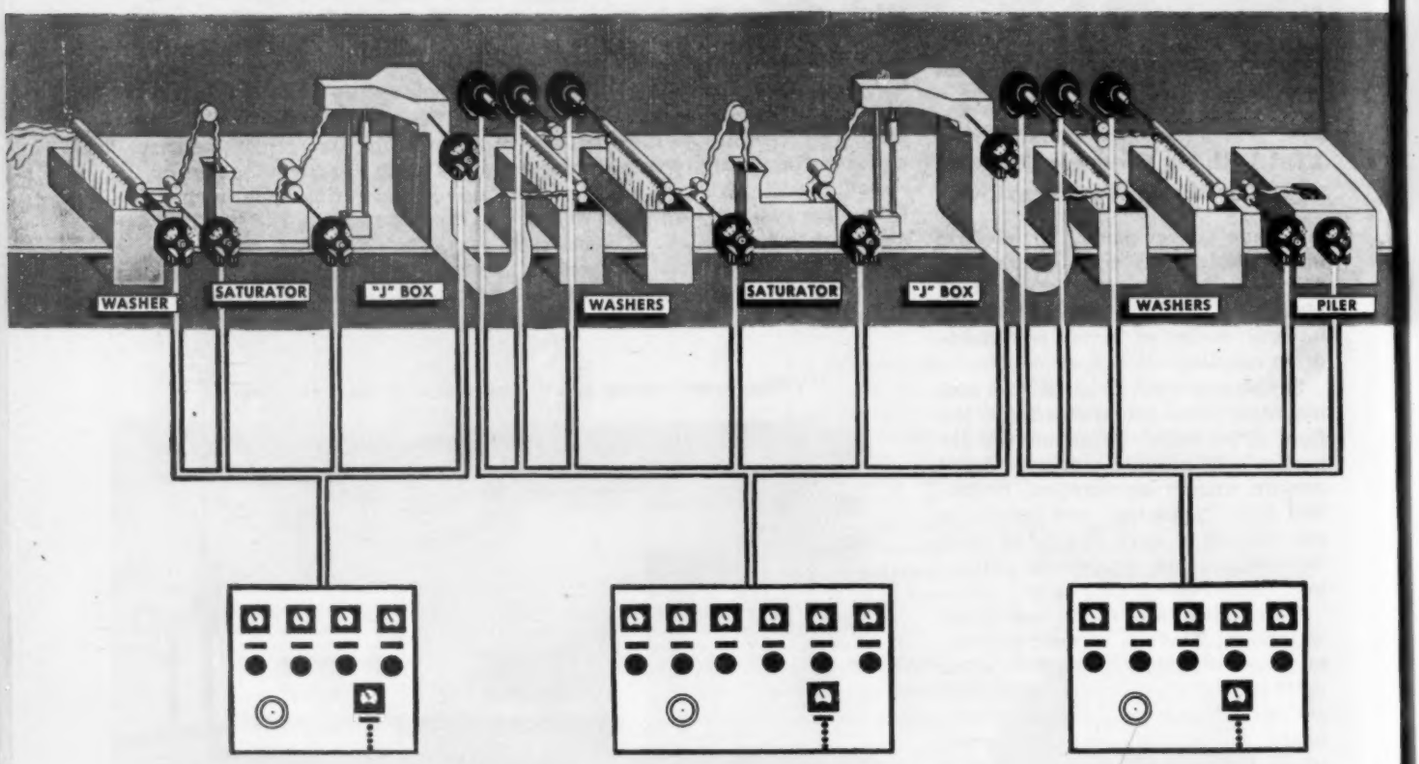
High speed curing and drying range (Process Heating).



YOU CAN BE SURE... IF IT'S Westinghouse



IN THIS CONTINUOUS BLEACHING RANGE DRIVE complete, convenient control is provided by this operator's control station. One of these stations is used to control each section or group of sections in a continuous range system. Features include push-button stations at one point for control of the section, an instrument for indicating the speed of the section, ammeters for indicating load on each motor, rheostats for adjusting these loads, and a master rheostat for adjusting the speed of the entire section.



FLEXIBILITY OF OPERATION is an important feature of the Westinghouse drive for this two-stage continuous bleaching system. In multistage continuous systems, Westinghouse drives permit the by-passing of any stage. Centralized control for the complete machine can also be provided.

Simplified Operation

OF CONTINUOUS RANGE DRIVES UP TO 375 YPM

When you change over your textile finishing processes to the new, continuous systems, there is no need for the drives to be complicated. They can—and will—be simple to operate and yet offer as much flexibility of control as you require, if they are Westinghouse adjustable-voltage, d-c range drives.

Westinghouse range drives are the result of co-ordinated engineering and application knowledge. Each drive functions as a unit, to give you accurate control of speed and tension. They have been designed for systems that operate at speeds up to 375 YPM.

Westinghouse range drives are sturdy in construction and trouble-free in use. They can be serviced readily by your present staff.

There is a co-ordinated Westinghouse range drive for every continuous process in the Textile Industry—for open width or rope systems, for those requiring heavy or light tension. Tried-and-proven installations include:

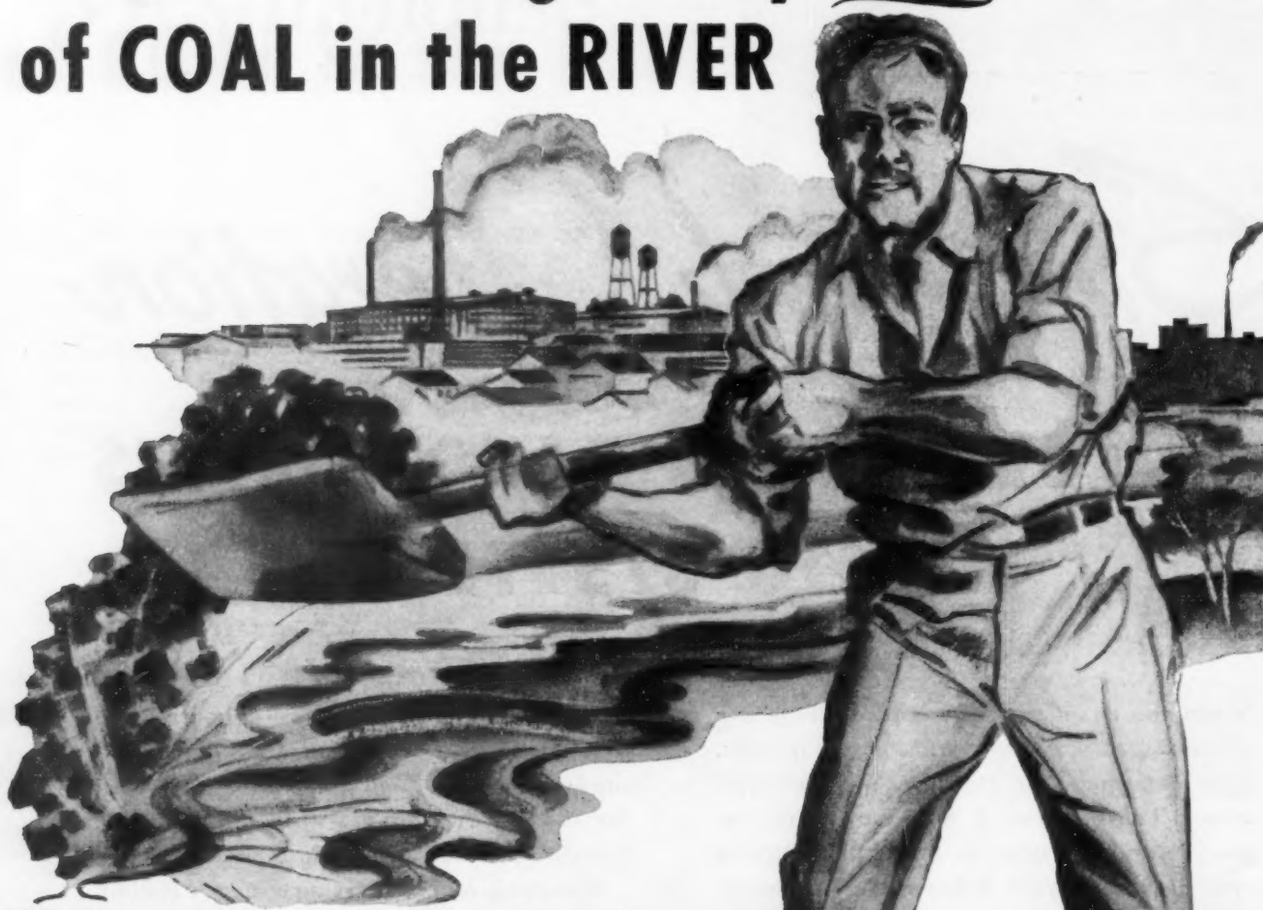
Bleaching ranges • Dyeing ranges • Boil-off drives • Cloth printing ranges • Mercerizing ranges • Tenter ranges • Washing, soaping and drying ranges.

Our Textile Industry Specialists will be glad to help you study your processes and assist in the application of the right range drive for simple, dependable operation. Call your nearest Westinghouse office, or write to Westinghouse Electric Corporation, P. O. Box 868, Pittsburgh 30, Pennsylvania. J-94812

Westinghouse

EQUIPMENT FOR THE TEXTILE INDUSTRY

Like Throwing Every 3rd Shovel of COAL in the RIVER



"YOU see, in our plant we use lots of hot water —all textile plants do; and when that water does its many jobs we just run it into the sewer. We've been mighty busy meeting demand and that's my alibi. Now I find time to look for ways to lower production costs, for, one frosty morn last winter I saw steam rising from our river. I found that we pour 200° water into the river. That chap representing Sims of Erie, Pa. said it was like heaving 1 shovel of coal out of 3 into the river. He guaranteed that I'd save the cost of his system for recovering BTU's in less than a year, at the rate we were going. But I thought he was just one of those enthusiastic salesmen. He said that 200° waste water was valuable fuel for his heat recovery system, and with a little boost from the main line he'd lighten the load on our old boiler and give me more really hot water than I ever had before.

Well, it's 9 months now and I have more than paid for the Sims of Erie, Pa. Heat Recovery System. Now who will believe it? I never would have if I didn't see that steam rising from our river. I understand that you, too, can do a job of saving if your sewer water is 120° or higher—mine was 200°. That's why I saved so much so soon, but it wasn't any too soon at that, for I could have done it years ago."

The SIMS CO.

Box 1096T, ERIE, PA.

Manufacturers of Exhaust Gas Boilers • Heat Exchangers • Storage Water Heaters • Feed Water Heaters • Steam Separators • Commercial Type Instantaneous Water Heaters • Oil Heaters • Quenching Oil Coolers • Caustic Soda (Sodium Hydroxide NaOH) Recovery Equipment and Unit Type Coal Pulverizers.

Silent Chain Couplings and Plastic Covers

A new line of stock silent chain couplings, complete with plastic covers, is said to be particularly adaptable to the textile industry.

The couplings are essentially two sprockets wrapped with silent chain. The sprockets are high quality steel, machined all over, and heat treated for maximum tooth hardness. The machined surfaces make alignment easy. The chain assures positive power transmission between the coupling halves.

Disconnection is accomplished quickly and easily by either of two methods: (a) unwrapping of the chain after removing the single connecting pin; or (b) moving either sprocket endwise out of mesh with the chain.

The couplings are made in five different sizes with a wide variety of standard bore diameters.

Morse Chain Co., 7601 Central, Detroit 8, Mich.

For additional data, request item J-186, using business reply card on page 262.

Packaged Air Conditioner for Industrial Applications

A new packaged air conditioner in large capacity sizes, combines in one compact unit the advantages of packaged air conditioning and the adaptability of a tailor-made system.

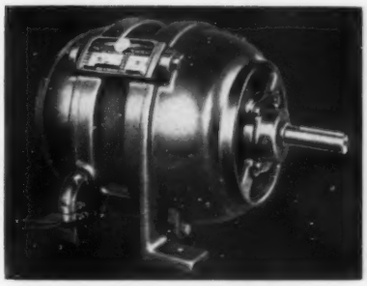
Available in 7½ or 10 hp sizes, the units may be furnished with or without water-cooled condensers. They are factory assembled with convenient connections for power, water and drain lines, and can be quickly and economically installed. The units are shipped knocked down for easy handling through standard doorways.

Dynamically balanced fans, precision-machined compressor parts, and a "floating" condensing unit insure quiet, smooth performance. The high volumetric efficiency of the condensing unit gives maximum cooling output with low power and water costs, cuts operating expense, and provides dependable, uniform temperatures.

Designed to provide controlled cooling for both industrial and commercial applications, the conditioner can also be used for winter heating by addition of a steam or hot water coil.

General Electric Co., Air Conditioning Department, Bloomfield, N. J.

For additional data, request item J-159, using business reply card on page 262.



Textile motor (Diehl).

Electric Motor for Textile Applications

Developed specifically for textile mill applications such as spinning frames, roving frames, pickers, etc., the new Type DIT Open (Screenless) Motor features moderately high starting torque with smooth, rapid acceleration; exceptionally high overload characteristics; high efficiency and power factor; and cool running.

Maximum freedom from lint accumulation is claimed as a result of large and unrestricted air passages through the motor, smooth finish and streamlining of motor castings, oversize rotor fans, carefully taped and smoothly insulated stator windings, and large end-cover openings.

Diehl Manufacturing Co., Somerville, N. J.

For additional data, request item J-147, using business reply card on page 262.

Jacketed Tank for Size Storage

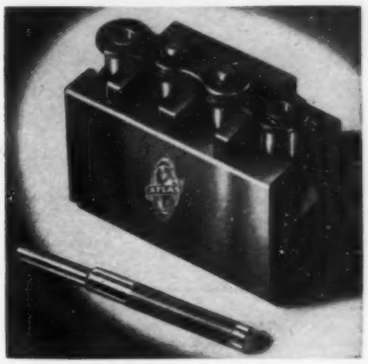
The Type CJ open top San-I-Tank is a vertical tank equipped with a high-pressure jacket for the storage of size. The tank is constructed with a highly polished stainless steel lining. The interior is free from pipes and coils, thereby offering greater working capacity and simple, easy cleaning.

A high pressure dimpled jacket is welded directly to the inner tank, resulting in a "flooded surface" with maximum heat transfer, it is claimed. Jackets are tested to 300 lb per sq. in., and are fully insulated with three inches of mineral wool and protected by an outer case of carbon or stainless steel.

The tank is equipped with a vertical removable agitator.

Metal-Glass Products Co., Belding, Mich.

For additional data, request item J-188, using business reply card on page 262.



Roller chain repair set (Atlas).

New Repair Set for Roller Chain

To facilitate roller chain repair, a new tool that prevents binding has been developed. It consists of an anvil, a fork and a punch.

To disassemble the chain, the prongs of the fork are inserted between the sideplates of the chain so as to span the two rollers containing the pins to be removed. The fork and chain are then laid in the slot of the anvil which is milled to the contours of the chain so that slippage cannot occur. In this position the chain is suspended on the fork, and the pins can be removed by striking each one alternately until driven through the links.

Because of its deep base, this new chain tool can also be used without the fork. In this case, the chain rests on the floor of the slot and the pins are driven into two holes through the base of the tool. Milled corners on the base further enable secure gripping by a vise if desired.

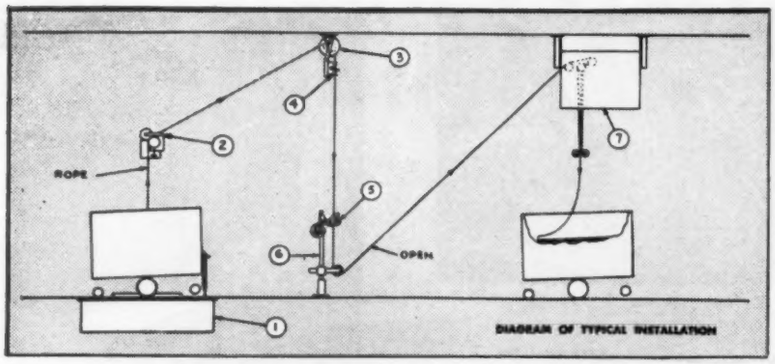
The set is available in sizes that fit any standard roller chain.

Atlas Chain and Manufacturing Co., Castor and Kensington Avenues, Philadelphia 24, Penna.

For additional data, request item J-615, using business reply card on page 262.

High Differential Unit Reduces Fuel Consumption

Now available for use with the Cochrane C-B System of condensate drainage control is the CBA unit which permits operation of the Cochrane C-B in higher differential pressure service. These units permit the handling of up to 100 gpm of condensate, and returning of the condensate to boilers or other pres-



Automatic cloth opening equipment (Mount Hope).

sure vessels operating at pressures up to 200 psi greater than that at the CBA inlet.

Basic changes in design of the CBA unit include raising the finned loop to accommodate the inlet jet housing on the opposite (impeller inlet) side of the loop, and substituting a larger spacer in place of the previous inlet which then becomes the outlet (impeller discharge side).

By speeding up the flow of condensate and eliminating the entrained air along with the condensate from the process equipment, the C-B System vastly increases the number of heat units returned to the boiler, according to the manufacturer. This results in a higher temperature on the heating surface from a given initial steam pressure — increasing the heating efficiency as much as 20%, increasing production as high as 61%, and effecting fuel savings from 10 to 25%, it is claimed.

Cochrane Corp., 3116 N. 17th St., Philadelphia, Pa.

For additional data, request item J-137, using business reply card on page 262.

New Loom Brake Lining

A new loom brake lining is made of resin treated fabric and by an improved impregnation process.

Known as Jacobs Brake Lining, Type 66-Single, it possesses a positive gripping surface that means quicker and more positive stops, according to the manufacturer. It is said to be wear-resistant. Available in 1" through 2" widths, the lining may be cut to required lengths or in long roll form.

E. H. Jacobs Northern Division, The Bullard Clark Co., Danielson, Conn.

For additional data, request item J-616, using business reply card on page 262.

Detwister Switch for Cloth Opening Equipment

A new Detwister Switch has been developed for Mount Hope Machinery Company's system of automatic cloth opening. It may be used in conjunction with a swivel type or stationary overhead sheave. The switch controls the rotation of a detwister platform on which stands the cloth truck.

The switch is placed immediately after the sheave and before the guiders. The guiders force the twist in the rope back to this switch which is designed to turn the platform around in the direction necessary to eliminate the twist.

Mount Hope Machinery Company, Taunton, Mass.

For additional data, request item J-617, using business reply card on page 262.

Automatic Reed Reconditioning Machine

Badly rusted reeds can now be reconditioned in short order and dirty reeds can be cleaned and polished in a few minutes with an Italian-made automatic Reeds Upkeeping Machine recently made available in this country.

The machine is equally well suited to recondition reeds which have been damaged by shuttles or picker sticks, it is claimed.

The machine consists of a brush mechanism of two brushes which rotate quickly and which move against each other so that the reed is brushed through without flaw from end to end. One of the two brushes is adjustable which allows the machine to be set for any desired reed length. In order to make the brush mechanism suitable for any desired operation, brushes are made exchangeable, making the use of horse hair, as well as metal wire brushes, possible.

The grinding arrangement built in the machine has a quickly traversing sliding table containing a special grindstone which acts on the reed. Through the quick back and forth motion of the grindstone and through the employment of a stone particularly well suited for the purpose, an excellent grinding result is attained so that within a short time all irregularities have been smoothed out satisfactorily.

During the grinding operation the reed stands still. After a certain number of back and forth motions of the stone it is automatically shifted and the reed moves the width of the stone and is again ground. Through this type of motion it is possible not only to smooth existing irregularities but also to round the edges of the reed blades.

American Textile Engineering, Inc., Arlington, N. J., sole U. S. agents.

For additional data, request item J-115, using business reply card on page 262.

Synthetic Detergent Stable to Acids and Alkalies

Energetic Synthetic Detergent is a liquid product designed to provide maximum detergency action. It is an essentially neutral, salt-free, nonionic detergent; it does not combine with calcium, magnesium or iron salts, and its washing action is not affected by hard water. The product is completely compatible with a wide variety of anionic or cationic finishing agents, oils and soaps.

Energetic is readily soluble in all proportions in cold water and, where it is desired, stock solutions of any concentration can be prepared simply by stirring the product with tap water. Easy solubility also indicates easy rinsability since Energetic is non-substantive and does not tend to build up on the fiber.

Stability to acids and alkalies in the concentrations ordinarily employed in textile processing is an outstanding feature cited for Energetic.

Energetic may be used advantageously in all textile operations where cleaning action or suspending properties are required. Recommended operations include kier boiling, open boil-offs, soaping of printed and dyed goods, dye leveling, wool scouring and hosiery scouring and dyeing.

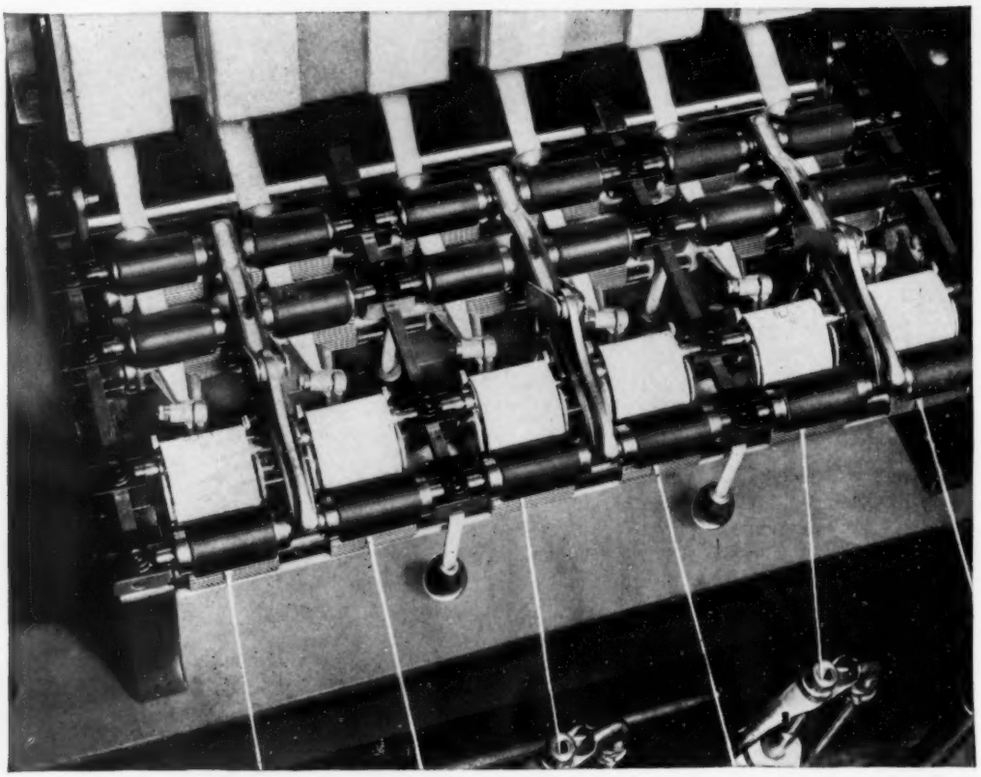
Armour and Company, Industrial Soap Division, 1355 W. 31st St., Chicago 9, Ill.

For additional data, request item J-111, using business reply card on page 262.

Franklin Process
LARGEST PACKAGE DYERS IN THE WORLD
PROVIDENCE
PHILADELPHIA
GREENVILLE
CHATTANOOGA
New York Representative
40 WORTH STREET
COLORS SELL TEXTILES . . . provided they are tasteful, harmonious and of the proper quality for the purpose.
It pays to use Franklin Process Colors, which are consistently tops in quality, and to employ a recognized expert to select and combine them.

If you spin your own yarn

You need . . .



WHITIN Single-Process Super-Draft ROVING FRAMES *because...*

Super-Draft is the only single-process roving frame that will satisfactorily control mixed fibres of different types and varying lengths. Uniform distribution of various fibres throughout the strand, accomplished through special aprons, special guide plates and special trumpets, results in even rovings and yarn and high quality fabrics. Staples of varying lengths including rayon, cotton and wool or any blend of these fibres can all be satisfactorily handled. Besides its versatility and product excellence, the Whitin single-process, Super-Draft roving frame offers your mill definite advantages from a cost standpoint: reduction in number of processes and floor space requirements... elimination of unnecessary machines . . . fewer spindles . . . economy in yarn costs and improvements in yarn quality. It will pay you to investigate.

Write today for complete information on Whitin Super-Draft and Inter-Draft Roving Frames.

Whitin MACHINE WORKS

WHITINSVILLE, MASSACHUSETTS
CHARLOTTE, N. C. • ATLANTA, GA.

Automatic Recording Dynamometer for Yarns

An Italian-made instrument, designated the Autodinamografo, tests yarns completely automatically and is provided with a recording mechanism.

Once the ends from a certain number of bobbins have been set on the spring clips of a sector which feeds them to the moving elements, all other operations are performed by the machine itself: the fixing of the yarn between the two clamps, the traction to its breaking point, the return of the clamps to their original positions, the recording of the results, the change of the bobbins and so on.

The arithmetic calculations of the mean strength are eliminated because at the end of the test cycle the diagram records the mean of the results. The diagram is said to be objective as it gives the results entirely automatically, showing at a glance all fundamental characteristics of the yarn, such as maximum and minimum breaking points and elongations.

American Textile Engineering Co., Inc., Arlington, N. J., sole U. S. agents.

For additional data, request item J-116, using business reply card on page 262.

Weight-Loaded Lubricator

A new weight-loaded lubricator is designed to deliver lubricant at constant pressure in any desired quantity. It may be used for greases and oils and, according to the manufacturer, it will decrease maintenance costs, improve equipment operation, and lengthen machinery life.

Typical uses are: application of lubricant to stuffing boxes of pumps and mixers, motors and engines, heavy machinery, line shafting bearings, motorized and lubricated valves.

Because weights of different values may be used and adjusted infinitely throughout the length of the lubricator arm, pressures may be applied to lubricants up to 150 pounds per square inch. By using additional weights even higher pressures may be obtained. The device has a bracket for universal mounting, with a shut-off valve available as optional equipment.

The position of the lubricator arm gives an exact indication of the amount of lubricant in the cup.

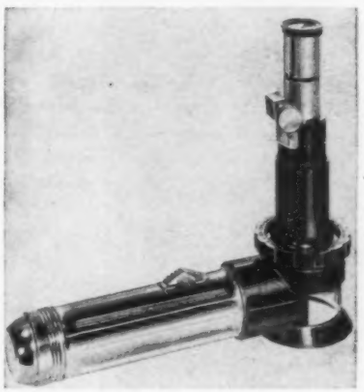
Mixing Equipment Co., 1024 Garson Ave., Rochester 9, N. Y.

For additional data, request item J-184, using business reply card on page 262.

ILLUMINATED MAGNIFIER

Flash-O-Lens Illuminated Magnifier has a knurled pinion for adjusting the 20 or 40 power tube easily and accurately to the user's exact visual needs.

A rubber roller on the shaft of the knurled adjusting pinion, which is mounted on the housing of the instrument, bears against the vertical tube housing the lenses. By turning the knurled pinion, the tube and lenses can be raised or lowered to bring the object being examined into perfect, sharp focus.



E. W. Pike & Co., Elizabeth, N. J.

For additional data, request item J-293, using business reply card on page 262.

Finishing Machinery by Cook-P & N

A new Steam Pad Dye Range with 100-inch face consists of a two-roll pigment padder, a three-roll caustic padder, a stainless steel ager, a three-tank oxidizing machine, three stainless steel slack washers, and a rope squeezer. The complete range is of fabricated construction and the only castings used are those on the ball bearing housings and minor accessories. The range is complete with rack and gear compensated drive.

A new mercerizing padder is made completely of fabricated steel and stainless steel. The frames are of the box type with rounded corners. Top and bottom squeeze rolls are stainless steel covered and the center roll is rubber covered. Pneumatic pressure is provided with the cylinders set into the frames. End guards for the rolls to prevent splashing onto the bearings as well as drive guards are standard equipment. The immersion rolls run in roller bearings.

A four-tank Open Width Washer has an individual motor for each pair of squeeze rolls. There is a radial type compensator at each nip. The top rolls are rubber covered; the bottom rolls, stainless steel covered. All guide rolls are of stainless steel including the heads and shafts. The stainless steel spiral rolls at each nip are driven from the lower squeeze roll. The pressure is applied pneumatically through diaphram which automatically lifts the top roll when the air is shut off.

A three-roll Pigment Padder has air cylinders set between the upper and lower fabricated roll arms. The center roll is stationary and is the driven roll. This method of driving the roll prevents slip between the rolls and eliminates the necessity of driving the top roll. This padder is of steel and stainless steel fabricated construction. The machine is equipped with stainless steel splash guards. The drive is also guarded.

A high-speed Vertical Singer with Kemp burners is 126 inches wide. There is a handle which pulls the cloth away from the burners when the machine stops. This arrangement can be made to operate automatically if required. A wet-out tank of stainless steel is included. Rubber covered squeeze rolls are also a part of the equipment.

A new Vertical Cloth Opener consists of detwisting machine and photoelectric control mounted on a single frame. The cloth is threaded through the detwisting machine which is automatically controlled to remove the twist.

Cook-P & N Machine Co., Inc., 365 Dorchester Ave., Boston 27, Mass.

For additional data, request item J-134, using business reply card on page 262. Please specify item.

Dry Suction Floor Cleaner and Electric Mopper

A new all-purpose Combination Dry Suction Cleaner and Electric Mopper for wet and dry pick-up has been marketed.

Used in conjunction with a floor machine, it picks up dirty scrub water quickly, efficiently lifting the

VAN VLAANDEREN
has a superior
NYLON
HEAT SETTING MACHINE

It's different! It's better!

Everyone agrees today that heat setting of nylon broadgoods is essential to bring out its inherent advantages as a fabric.

Van Vlaanderen engineers—always pioneers in superior processing developments—have approached the problem of heat setting in an entirely new and better way. They have produced the first heat setting machine designed to give complete uniformity of treatment; the first machine designed on the advanced principle of *circulated heated air as the setting agent.*

***Circulated heated air*, permeating every fibre of the goods, uniformly and simultaneously effects setting — without any part of the machine or goods *ever* exceeding the setting temperature. This method results in better set fabrics; stable in dimensions, free from sagging, shrinking or stretching, and having great resistance to wrinkling.**

Circulated heated air* permits simpler design and easier, more reliable control; less possibility of mechanical failure and (of great interest to the finisher) *lower initial and operating costs.

***Circulated heated air* is, in our considered opinion, the most satisfactory of the various methods of heat treatment.**

We would like you to see this machine in operation. Why not write us now?

VAN VLAANDEREN MACHINE COMPANY

370 Straight Street, Paterson 3, New Jersey • Cable address: Vlaanderen, Patersonnj, U.S.A.

World's largest manufacturer of machines for processing modern fabrics

water from cracks and crevices by powerful vacuum and allowing the floors to dry almost immediately. Also, by following the floor machine closely with the electric mopper, floors are not tied up during cleaning periods, but continue in full use.

The combination is easily converted to dry suction, and in this capacity has no outside dust bag. Strong suction deposits the dust and dirt safely inside the tank for extra protection.

Kent Company, 258 Canal Street, Rome, N. Y.

For additional data, request item J-174, using business reply card on page 262.

Squeeze Roll Loading Station

The new Squeeze Roll Loading System offers several significant improvements. The most noteworthy advantage of this system is the use of springless diaphragm motors. This permits the use of smaller diaphragms to produce the desired pressure, because the loading air does not have to overcome the spring pressure. Furthermore, more positive opening of the rolls is secured because they are lifted by full air pressure rather than by springs.

The loading panel incorporates the pressure regulator with its high precision setting and drift-proof action. The panel is furnished with either a recording pressure gauge or a dial pressure indicator.

Brown Instruments Division, Minneapolis-Honeywell Regulator Co., Wayne and Roberts Aves., Philadelphia 44, Pa.

For additional data, request item J-128, using business reply card on page 262.

Silver Plating Powder for Electrical Connections

A new method of silver plating high amperage electrical connections on the job has been developed which is said to be especially desirable for improving continuity of electrical service and reducing maintenance time and costs as it offers a quick and easy solution to the problem of heating due to oxidation.

Even on connections where overheating is not apparent, Cool-Amp Silver Plating Powder prevents series of losses too small to create noticeable heat but still accumulating into a major power loss, it is claimed.

The silver plating powder deposits a coat of silver that will not peel off and gives cool maximum conductivity for copper, brass or bronze contacts. It is harmless to the user and is simple to apply. The only equipment needed is a sharp steel wire brush or abrasive cloth, clean rag and water. A pound of the powder will silver plate approximately 6,000 square inches.

The Cool-Amp Co., 8603 S.W. 17th Ave., Portland, Oregon.

For additional data, request item J-129, using business reply card on page 262.

PORTABLE BARREL STAND

The Wizard barrel stand is a specially designed unit that enables the trucker to raise a heavy barrel or drum so that the contents can be drained into smaller containers. It reduces labor costs and eliminates any danger to the trucker while handling heavy barrels and drums.

The stand is electrically welded, has wrought-iron toes, and is extendable for more lifting leverage. Steel rollettes are located on top of the stand so that the barrel can be turned into desired position.

Modern Equipment Co., 2007 Cuming St., Omaha 2, Nebraska.

For additional data, request item J-619, using business reply card on page 262.

Electrical Load Recorder Guides Mixing Operation

Viscosity of materials in mixing or other types of agitating machinery can often be measured indirectly by measuring the power input to the electrical motor which drives the mixer. In many processes of this type, the materials must be mixed to a given viscosity, or until a definite reaction end point is reached where viscosity undergoes an abrupt change. By experience, viscosity can be related directly to motor input in kilowatts.

For such applications, Micromax Electrical Load Recorders are being used. Method of installation is straightforward. A thermal converter is connected in the power leads to the drive motor, and converter output is wired to a potentiometer-type load recorder. The instrument continuously records motor input in kilowatts or on some arbitrary scale supplied by the user.

Leeds & Northrup Company, 4934 Stenton Avenue, Philadelphia 44, Pa.

For additional data, request item J-178, using business reply card on page 262.

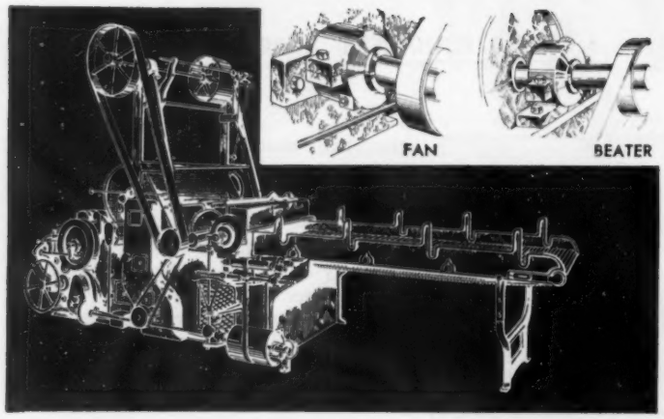
New Flat Grinder Uses Grindstone

An Italian-made revolving flats grinding machine, employing a traversing grindstone instead of an emery-covered roller, has recently been made available in the United States.

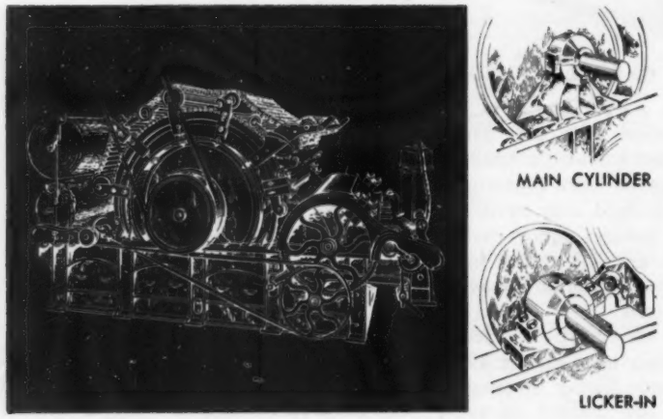
The machine is equipped with two electric motors; one drives the grindstone at 3000 revolutions a minute, and is mounted with it on a sled which traverses on a double-thread spindle, driven by the second motor. At the beginning of the grinding operation, the mechanism is set for the highest position of the stone, which, while traversing underneath the flat, automatically rises at the rate of 1/100 to 1/2000 of an inch until the highest position is reached. By means of an automatic steering device the stone traverses a few more times back and forth on the same plane, without rising, to insure uniformity, without causing hooks.

Grinding dust is automatically removed by a suction device built onto the sled and traversing with the grindstone; this protects the spindle threads and assures smooth traverse of the sled.

The machine grinds two flats at one time, and special provision makes it possible to examine the finished pair of flats by means of a special control meter while the next pair is being ground. As soon as the grinding of one pair is finished, the stone is returned to its starting position by



SS CHANGEOVER UNITS for PICKERS—*Fans and Beaters,* SKF-equipped, maintain proper settings and operate at constant speeds because there is practically no wear.



SS CHANGEOVER UNITS for CARDS—*Main Cylinders and Licker-Ins*— SKF Bearings support heavy loads and operate at high surface speeds .... eliminate worn shafts and lubricant leakage.

SS CHANGEOVER UNITS for SPINNING FRAMES and TWISTER CYLINDERS— SKF Self-aligning Bearing is preassembled in self-contained housing. *One* basic unit, four bearings .... adaptable to any position on cylinder.

SKF BEARINGS are STANDARD on SS Southern States TEXTILE CHANGEOVER UNITS

The largest manufacturer of cast-tooth and cut-tooth gears in the South, Southern States Equipment Corp. of Hampton, Georgia, has standardized on SKF Bearings for their textile changeover units.

The design of the units permits a wide adaptation to most textile machinery. Regardless of the type of your changeover requirements, Southern States has the unit—and it's SKF-equipped. SKF Industries, Inc., Phila. 32, Pa.

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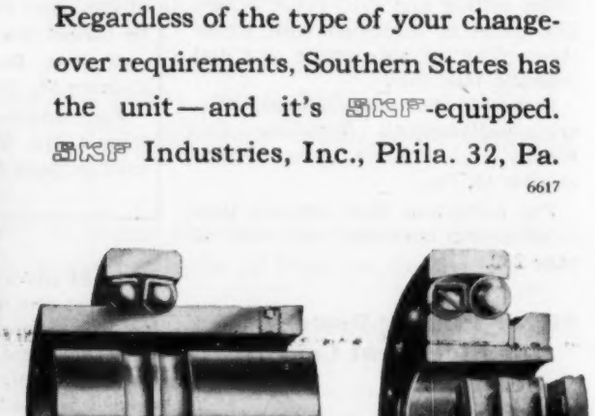


TEXTILE BEARINGS ENGINEERED BY SKF

means of a handwheel, and when the next pair of flats is mounted, the machine is started again by means of a pushbutton.

American Textile Engineering Co., Inc., Arlington, N. J., sole U. S. agents.

For additional data, request item J-117, using business reply card on page 262.

Stainless Steel Has Good Machining Properties

High hardness, strength, and corrosion resistance are combined in a new grade of stainless steel which is recommended especially for gears, cams, bolts, valves, shafting and pump parts in textile, chemical, and allied processing equipment.

Containing 17% chromium, 4% nickel and 4% copper, 17-4 pH stainless steel has a corrosion resistance approaching that of 18-8, is not subject to intergranular corrosion, and has the hardness and strength of the less corrosion resistant, standard grades of hardenable stainless steel, according to the manufacturer. This steel is magnetic in all conditions and has good machining and welding properties. It is available as bar and wire in either the annealed or hardened condition.

Armco Steel Co., Midddletown, Ohio.

For additional data, request item J-107, using business reply card on page 262.

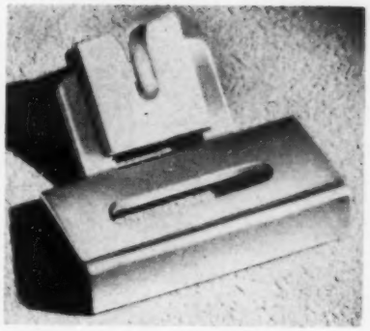
New Winder and Redraw Guide with Holder

A new AlSiMag winder and redraw guide with holder has been introduced which is reported to be especially valuable for processing synthetic, woolen, worsted, high twist cotton and other yarns.

The holder is made of anodized aluminum. An oblong screw slot permits ready positioning on frames of Monarch, Sipp-Eastwood or Atwood winder, spinner and redraw machines.

The guide slips into curved fingers of the holder. These fingers are curved or bowed slightly to form a spring tension on the slots on the outer sides of the inserted guides. The guide may be pulled out for cleaning and slipped back into position easily, and the holder may also be removed easily for cleaning.

The guide is furnished in AlSiMag 192, a non-conductor of electricity; or in AlSiMag 193, a conductor of electricity, for dissipating static. Otherwise these two materials are identical in all physical characteristics.



AlSiMag winder and redraw guide (American Lava).

American Lava Corporation, Chattanooga, Tenn.

For additional data, request item J-620, using business reply card on page 262.

New Blending System Accurate and Economical

The G-S Blending System consists of a group of feeders and feed tables which first build a sandwich in accordance with stated proportions of the various component fibers and then deliver this sandwich to the storage bins, conveyor pipe, or feeders without destroying or altering the composition.

F-5 Rayon Feeders deliver the stock to be placed in the hopper to a feed table 42 feet long. The primary blending takes place on the feed table.

A No. 6 fan with a special wheel takes the stock from the feed table and delivers it to a No. 6 air filter, which forms the loose and separated fibers into a mat of uniform composition. The mat, formed on the screen of the No. 6 filter, emerges from the delivery roll in the form of a thin sheet laid on the apron at the bottom of the receiver, which is moved slowly forward and backward alternately by a mechanism consisting of a wire rope and an automatic reversing windlass. Each traverse of the receiver adds a layer of stock to the sandwich being built on the apron. This traversing is continued until the stock completely fills the receiver.

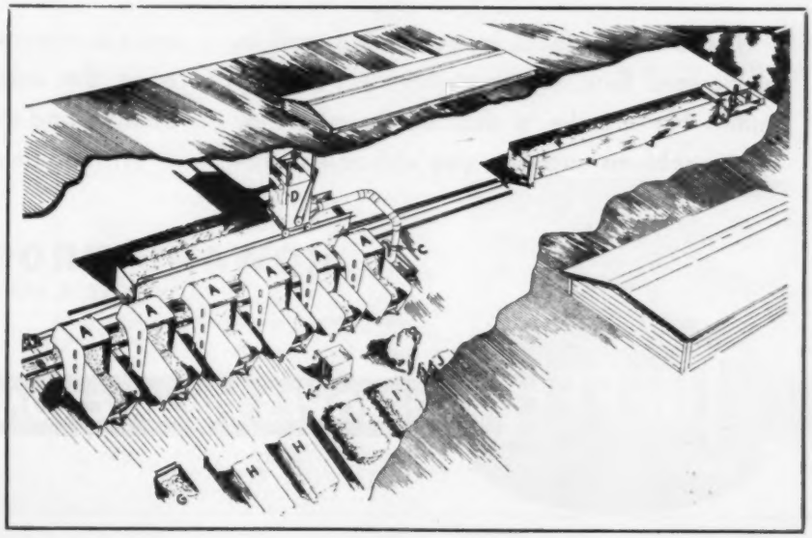
When the receiver is full, the sandwich is transferred to the sandwich feeder. This transfer is effected by locking the receiver with its load to the sandwich mixer. The apron in the bottom of the receiver is then put in motion to effect the transfer of its load to the apron of the sandwich feeder. As soon as the transfer has been effected, the receiver is returned to its original position under the No. 6 air filter.

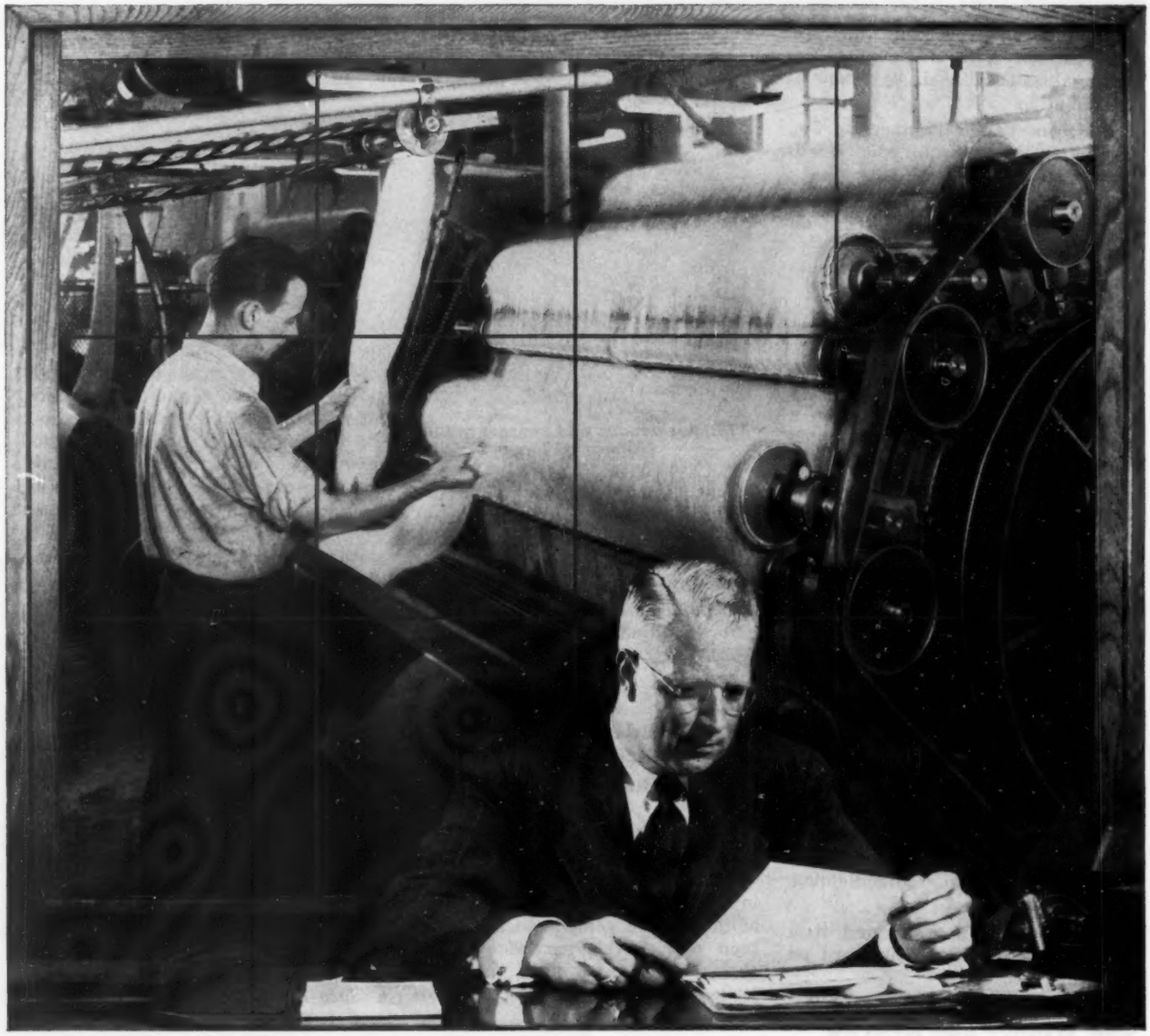
The only function for the operator is to keep the hoppers properly loaded. One man can operate two systems at 1200 pounds per unit per hour, according to the manufacturer.

Saco-Lowell Shops, 60 Batterymarch St., Boston, Mass.

For additional data, request item J-212, using business reply card on page 262.

The G-S Blending system (Saco-Lowell).





Are YOUR Carding Costs Too High?

If there is a doubt in your mind, call in a Howard Bros. representative, a TUFFER man. He'll make a thorough analysis of your problems and give you valuable assistance in increasing the efficiency and in lowering the costs of your carding. Put his training and experience to work for you!

Write to any Howard Bros. plant or office.

HOWARD BROS. MFG. CO.

WORCESTER 8, MASSACHUSETTS

Southern Plants: Atlanta, Ga. and Gastonia, N. C. **Branches:** Philadelphia, Pa. and Blanco, Texas

Direct Representation in Canada

A-8

TUFFER CARD CLOTHING

IMPROVES PRODUCTION ALL ALONG THE LINE

7-Tank Continuous Open Width Machine

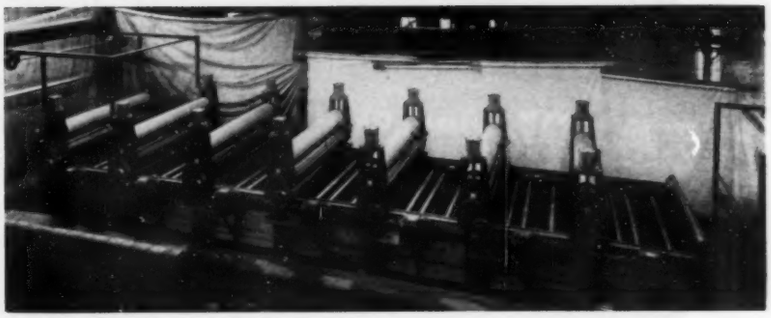
The new 7-tank continuous open width machine is of stainless steel construction, with the tanks being held in supporting frames. The immersion rolls and steam pipes are also of stainless steel. The rubber covered squeeze rolls run in roller bearings. Pressure is applied by air cylinders or air motors.

Expander rolls and a spray pipe precede each pair of squeeze rolls. The entering end of the machine is fitted with a cloth guider and the delivery end with a folder or rolling arrangement, or both. Drive is by individual motor for each nip. Uniform tension is assured. Speed range is 4 to 1.

This machine is used for crabbing fabrics such as gabardine, serges, rayon blends, etc., and for open width scouring or dyeing. It is available in all widths and any number of tanks.

Birch Brothers, Inc., 32 Kent St., Somerville, Mass.

For additional data, request item J-621, using business reply card on page 262.



Seven-tank, continuous open width crabbing machine (Birch).

Asphalt-Asbestos Shingles Offer Greater Fire Safety

Buildings roofed with Fire-Chex, new asphalt-asbestos roofing shingles, will enjoy greater fire safety, according to the building material manufacturer. Fire-Chex contain an asbestos-bitumen plastic compound. When subjected to flame the compound does not melt and flow. Thus, the shingle's organic fiber base is not exposed to fire. The plastic compound remains stable, puffing up to form a skeletal mat, insulating the base. Actually it raises the fire up and away from the roof deck.

These shingles are extra heavy, weighing 325 pounds per square. Fire-Chex are available in four shadow blend designs: red, green, blue and gray. Textured may be obtained in brown and black.

The Philip Carey Mfg. Co., Cincinnati 15, Ohio.

For additional data, request item J-194, using business reply card on page 262.

Inexpensive Humidifier Designed for Small Areas

A new humidifier through means of a simple automatic control will keep any small area such as a testing chamber at a constant relative humidity. In many cases it eliminates the need for elaborate conditioning equipment where only simple humidity testing is required.

The following features are noteworthy: All parts are of copper and in addition the dome is chrome plated; control is completely automatic with a dial like that on a home thermostat—just turn the dial to the humidity required; to install, just pour water into the unit through the easily accessible spout and plug into electric socket—the control attaches to the case wall by suction cups for easy reading; a float level indicator shows the amount of water remaining in the unit; vapor is put out into the air by centrifugal force.

Abbeon Supply Company, 58-10 41st Drive, Woodside, N. Y.

For additional data, request item J-112, using business reply card on page 262.

New Protected-Type Wound-Rotor Motor

The new Form BW protected-type wound-rotor motor is built in NEMA frames 224-505 in ratings up to 100 hp, and in larger frames up to 2000 hp.

Frames and end shields are drip-proof. In addition to the standard drip-proof enclosure, these motors are available splash-proof, and totally-enclosed non-ventilated. Other mechanical modifications include NEMA floor-, sidewall-, and ceiling-mounting assemblies, and NEMA C face and D flange mountings. Both C face and D flange motors are available for horizontal or vertical operation, with or without feet.

The motors are designed for applications requiring smooth acceleration, high starting torque with low starting current, ability to start and stop or reverse frequently, or vari-

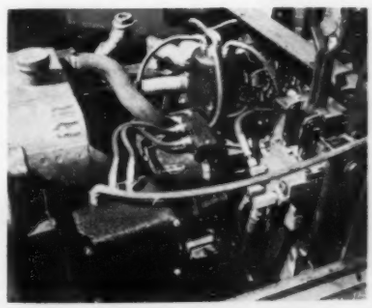
SPARK-ENCLOSED GAS-POWERED FORK TRUCKS

A spark-enclosed fork-lift truck has been developed to provide industry with a gas-powered unit having maximum protection against fire hazard. The primary purpose of the spark-enclosed construction is to shield all sparking devices in such a manner as to afford safety for intermittent operation in gas- and dust-laden surroundings.

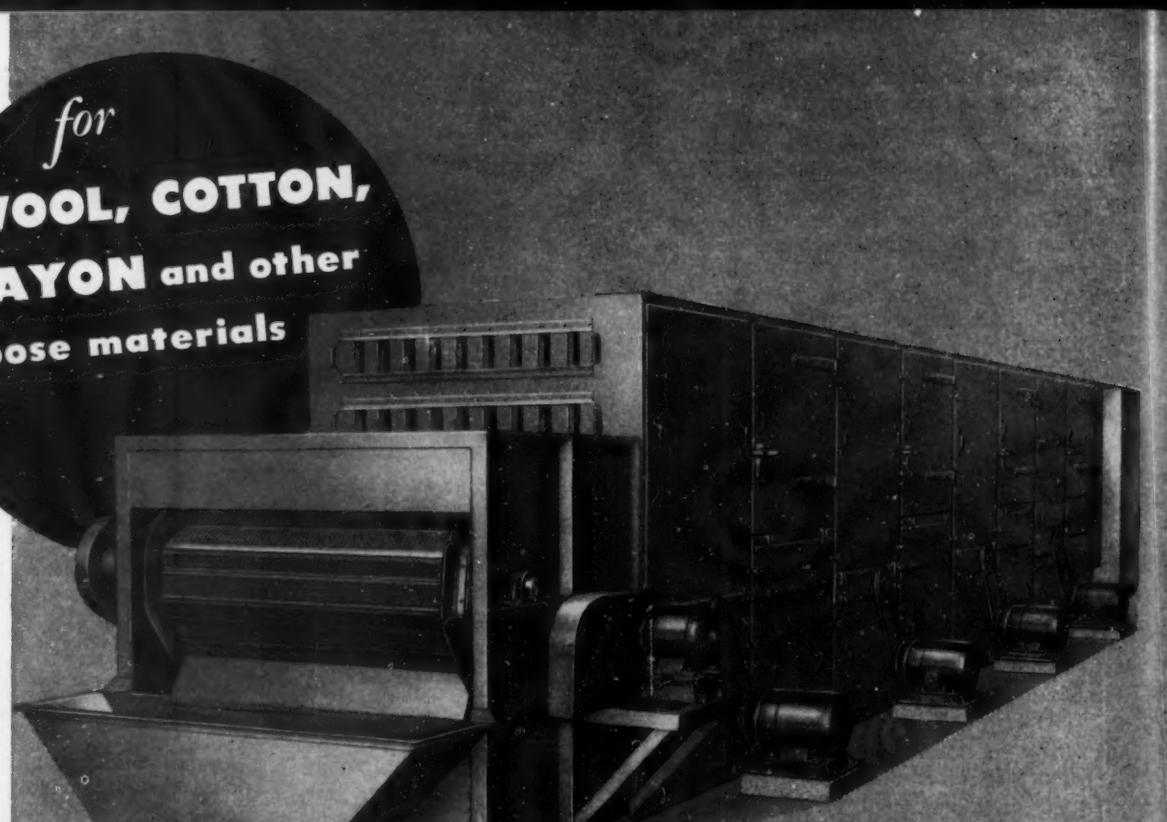
This has been accomplished by enclosing the electrical system with rubber and metal sheathing and containers; by employing a water-cooled manifold and muffler, and by installing static-conductive tires.

Clark Equipment Co., Industrial Truck Division, Battle Creek, Mich.

For additional data, request item J-421, using business reply card page 262.



for
WOOL, COTTON, RAYON and other loose materials



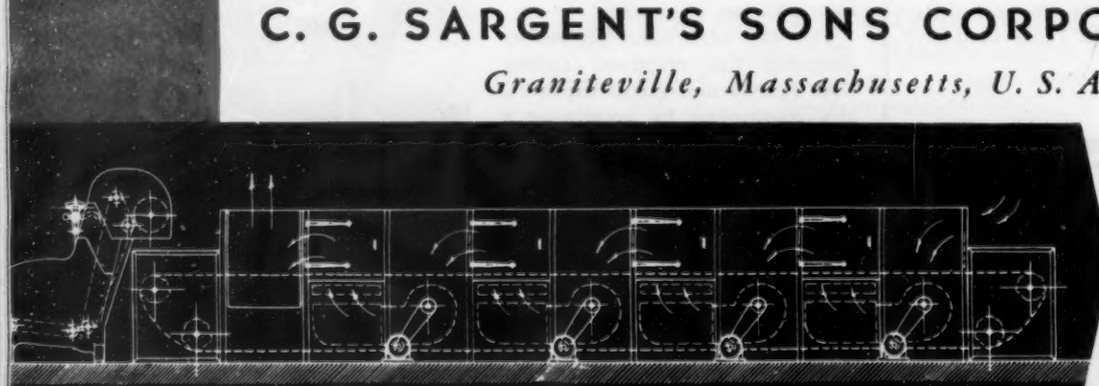
SARGENT'S *CONTRA-FLOW* Single Apron Dryer

Sargent presents a NEW, fast, automatic, single apron dryer employing the counter-air-flow heating principle. This system provides the most rapid and economical textile drying ever developed for wool, cotton, rayon and other synthetic and loose materials.

The material to be dried and the air which dries it *enter* the dryer at *opposite ends*, and *travel* through in *opposite directions*. The fresh air enters the dryer at room temperature at the delivery end. Passing upward then downward through the material, the air is constantly reheated and gains in temperature and moisture content as it travels toward the feed end. Wet material traveling through the dryer is subjected first to hot, wet air, then progressively to drier, cooler air. In the final stage, cool room temperature air passes through the hot, dry material and is thus delivered from the dryer in perfect condition and *without carrying away heat.* For complete information please write for Bulletin No. 183.

C. G. SARGENT'S SONS CORPORATION

Graniteville, Massachusetts, U. S. A.



Schematic diagram of the SARGENT CONTRA-FLOW SINGLE APRON DRYER showing direction of travel of air through fans and heating elements. Material travels in opposite direction.

able speed. They are suitable for driving conveyors, fans, centrifugal compressors, etc.

Crocker-Wheeler Electric Mfg. Co., Ampere, N. J.

For additional data, request item J-131, using business reply card on page 262.

Stainless Steel Gate Valve

Development of a new compact stainless steel Union Bonnet Gate Valve has been announced.

Construction features include union bonnet design for long service life and simplified maintenance, ball and socket point contact discs which adjust themselves in any position, and a minimum of six turns of packing to assure effective sealing.

Available in various stainless alloys, in sizes ½", ¾", and 1", this valve is recommended for fixed plant installations, as well as for use on fabricated equipment.

Cooper Alloy Foundry Co., Hillside, N. J.

For additional data, request item J-132, using business reply card on page 262.

New Valve Development

A new plastic diaphragm makes possible the valving of 66° Be sulphuric acid without leakage, dripping or sticking.

Valves equipped with these diaphragms are available in sizes from ½" through 4", with a choice of cast iron, cast steel, Durimet, or glass lined bodies. All except the glass lined valves are available with flanged or screwed ends, the glass lined unit being available with flanged ends only. All sizes are suitable for pressures to 100 psi and temperatures to 125 F.

The Hills-McCanna Co., 3025 North Western Avenue, Chicago 18, Ill.

For additional data, request item J-164, using business reply card on page 262.

Static Eliminator Requires No Maintenance

Employing safe voltages, the Herbert Oxy Neutralizer Bar creates, according to the manufacturer, a carona which is six times that made by conventional static eliminating equipment, permitting the material in process to be under the influence of the eliminator for a longer time, thereby assuring absolute neutralization.

The equipment is designed for easy installation; the bar may be installed either above or below the stock processed as required. The average installation can be made in less than one hour, it is claimed. Items necessary for installation are furnished in packages made up for various machines. Electrical supply is obtained by merely plugging the transformer cord into any convenient 110-volt, 60 cycle receptacle.

A significant feature cited for the equipment is the fact that no maintenance is required. The emitter points are designed to reduce necessity of cleaning to a minimum.

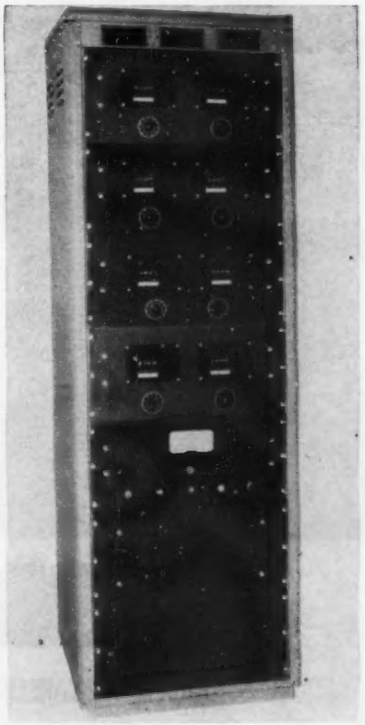
American Textile Engineering, Inc., Arlington, N. J., sole U. S. agents.

For additional data, request item J-119, using business reply card on page 262.

Electron Micrometer Records Yarn Variations

The Electron Micrometer measures the evenness of yarn by non-contact electronic means. Model EMC can be used to analyze the overall quality of the yarn; in addition to a direct measurement, it furnishes a graphic record plus a count of the number of high spots (slubs, neps, knots, etc.) and of low spots in the material under examination. The counters register whenever the yarn diameter exceeds or goes below the preset limits, which are independently adjustable. The graphic record is furnished by the high speed brush recorder.

Electron micrometer, Model EMC (Standard Electronics).



The accompanying illustration shows the "Yarn Analyser," which has eight counting units in series. These are set at various intervals to give a complete statistical analysis of yarn evenness variations, without the necessity for chart interpretation.

Measurements are made continuously, without contact, distortion, flattening or stretching. Variations in moisture content or atmospheric conditions do not affect the accuracy.

The measuring medium is a weightless beam of light. Measurements are consistent, direct and accurate on all fibers, both natural and synthetic, alone or in blends.

In operation the image of the material under inspection is picked up on the light sensitive photo tube, converted into electrical energy and the resultant signal amplified to register on a meter, record on a graph or actuate mechanisms to count the number of times predetermined tolerance limits are exceeded. Designed primarily for yarn measurement, the instrument is also finding application in the measurement of rovings.

Standard Electronics Research Corp., 2 East End Avenue, New York 21, N. Y.

For additional data, request item J-622, using business reply card on page 262.

Fischer & Porter Developments

Six items of equipment have been introduced by Fischer & Porter Co. during the past year:

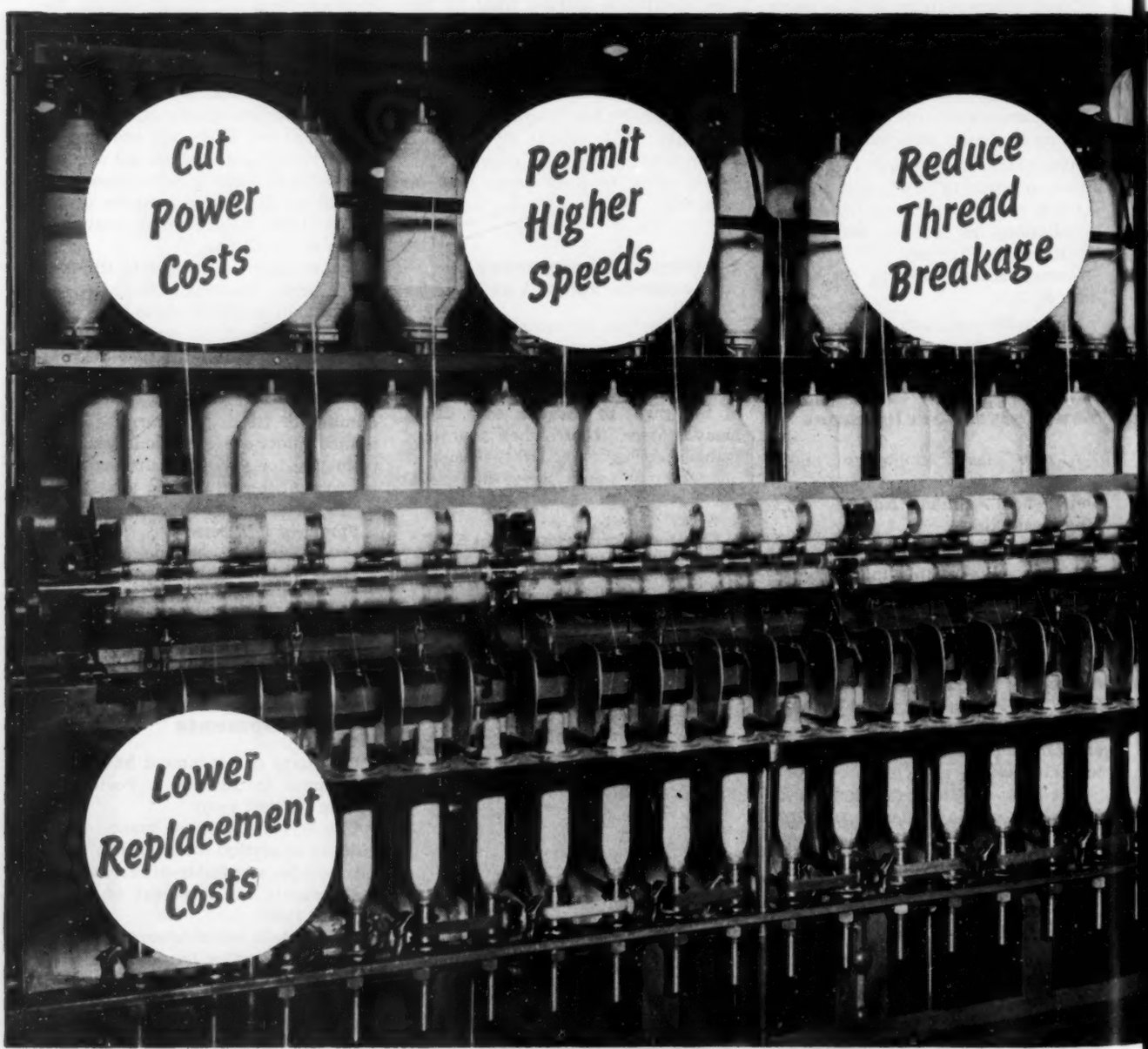
The Hypochlorinator, made almost entirely of methyl methacrylate plastic, includes a variable-area meter for the accurate measurement of hypochlorite flow.

A porcelain variable-area meter is suitable for service on corrosive materials such as sulfuric and hydrochloric acids, calcium hypochlorite, water solutions of chlorine, and others.

The Furnace Floguide is a variable area-meter especially designed to provide accurate means for the measurement of gas flow rates. Its metering elements are made of stainless steel.

The Magna-Sight Flow Guide and

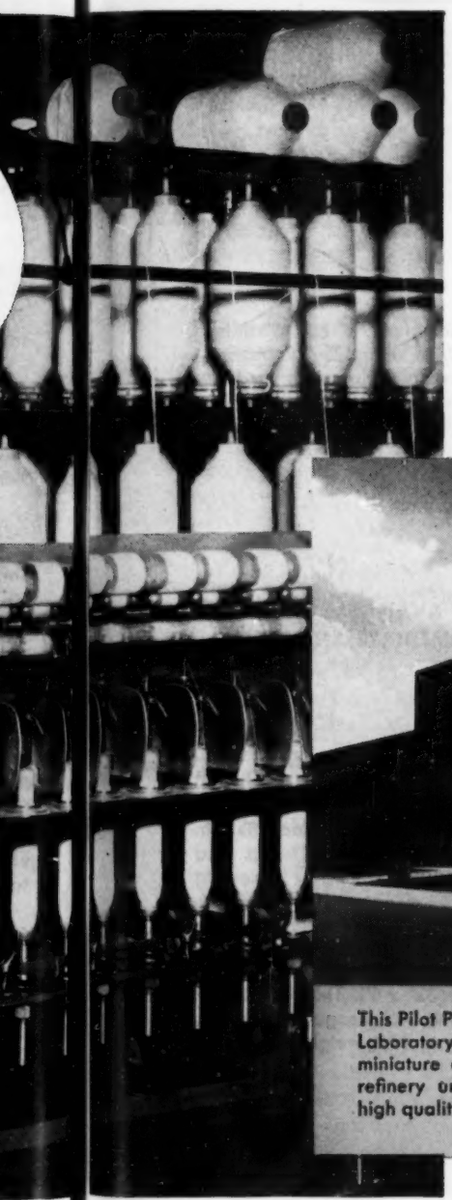
SINCLAIR LILY
Reduce Bolster Wear



SINCLAIR

YOUR NEAREST SINCLAIR AGENT WILL GLADLY ARRANGE

WHITE OILS
Up To Two-Thirds



In a textile mill, wear of bolsters on the spinning frame allows spindles to wobble and causes uneven draft . . . which affects the perfection of the yarn. Replacements of worn bolsters add to production costs.

When Sinclair LILY WHITE OIL AX, BX or CX is the lubricant, bolster wear is greatly diminished. Mill records show that LILY WHITE OILS, improved and specially compounded, reduce bolster wear as much as TWO-THIRDS . . . resulting in fewer bolster replacements, greater perfection of products and lower cost of production.

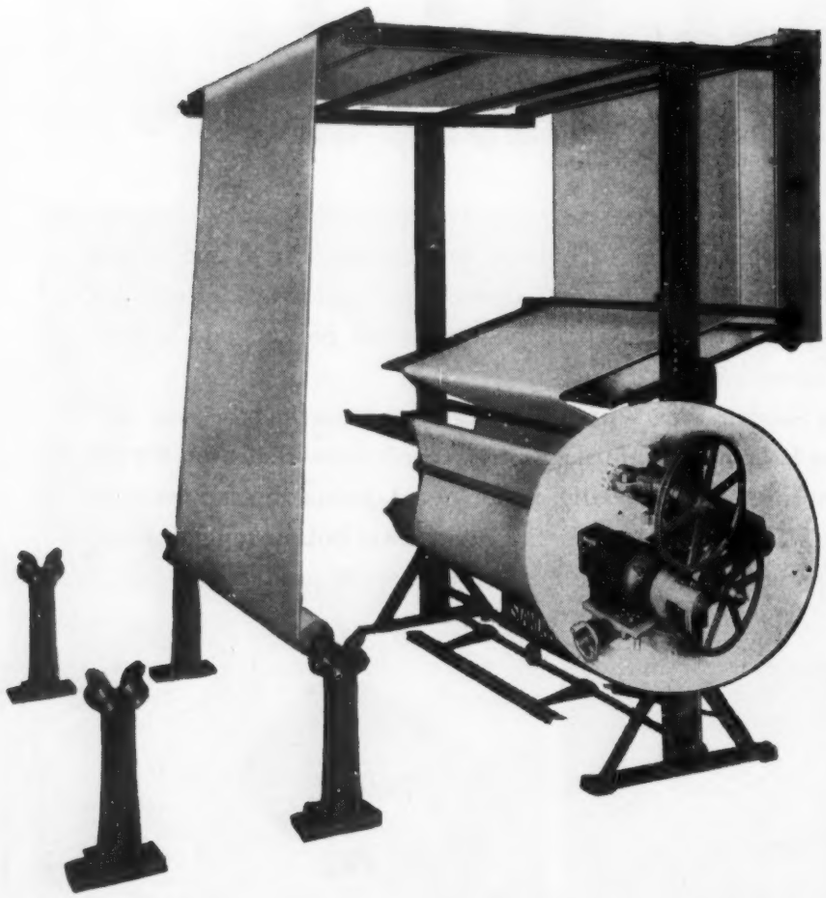
This Pilot Plant, part of the great Sinclair Research Laboratory at Harvey, Ill., provides space for six miniature operating replicas of commercial-sized refinery units. Continuous research explains the high quality of LILY WHITE and other Sinclair Oils.

Making a study of crystal structure of catalysts, this Sinclair researcher at Harvey uses physical chemistry to develop refinery techniques in a never ending effort to bring industry better petroleum products at lower costs.

TEXTILE LUBRICANTS

FOR LUBRICATION COUNSEL, OR YOU MAY WRITE TO SINCLAIR REFINING COMPANY, 630 FIFTH AVE., NEW YORK 20, N. Y.

STANDARD FLUORESCENT LIGHTING FIXTURES
for CLOTH INSPECTING MACHINES



Standard Fluorescent Lighting Fixture connected to our Cloth Inspecting, Measuring and Winding Machine.

Insert shows our V Belt Variable Speed Drive, manually controlled, which permits variation in yardage speeds from 11 yards per minute to 57 yards per minute.

AVAILABLE FOR IMMEDIATE SHIPMENT

Constant and uniform daylight for your Cloth inspection is provided, 24 hours a day, when you use our New Standard Fluorescent Lighting Fixtures.

Efficiency is greatly increased and eye fatigue is eliminated, as there is no glare or eye strain. There is an even distribution of light, controlled by 9 tubes, and perfectly defused by indestructible, white opal Plexiglas. You can have as little or as much light as the particular fabric requires.

The New Standard Fluorescent Lighting Fixtures are made entirely of heavy-gauge sheet steel and finished in baked porcelain enamel — white inside and gray exterior. Equipped with 9—24" Fluorescent Tubes, 20 watts, type T-12, 4500° white. 4 Toggle switches, alternate control, AC current 110 volts, 60 cycles, single phase.

A 13' light cord and plug is furnished with each fixture. Two brackets, at the top of fixture are provided to be used with chain or other mounting to attach to ceiling or Inspecting Machine.

All wires are centralized in the back of panel and the Plexiglas can be removed from the front side of the Fixture enabling the replacement of tubes.

Overall cabinet dimensions, 57" x 32" x 6". This size cabinet will handle goods up to and including 54". Larger size fixtures can be manufactured upon request. Net weight, 88 lbs. — Shipping weight, 150 lbs.

STANDARD MILL SUPPLY

6708 EMPIRE STATE BLDG.
NEW YORK, N. Y.

1064-1080 MAIN STREET
PAWTUCKET, R. I.

513 SOUTH TRYON STREET
CHARLOTTE, N. C.

Look-Box is a simple flow rate indicator for coolants, lubricants, opaque liquids, and slurries. It is made especially for those jobs where accuracy within several per cent is satisfactory.

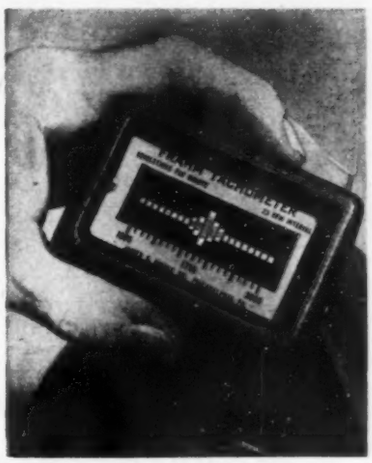
Ratosleeve Flow Meter Standardization provides a versatile solution to plant-wide flow measurement requirements. Flow capacities from 2 gpm to 6200 are handled with a minimum number of basic metering parts designed for installation inside standard pipe fittings. Mountings for secondary recorders, controllers and integrators are interchangeable in all sizes.

Rato-Vane Wafer-Type Butterfly Valves are made in three standard materials: cast iron, Type 304 stainless steel, and Type 316 stainless steel, depending upon the type of corrosion resistance required.

Fischer & Porter Co., Hatboro, Pa.

For additional data, request item J-458, using business reply card on page 262. Please specify item.

INSTRUMENT MEASURES SPEED QUICKLY AND ACCURATELY



This Miniature Frahm Resonant-Reed Tachometer requires no contact with rotating element and imposes no load on the machine under test. It cannot be injured by over-speeding and requires no maintenance whatsoever, according to the manufacturer.

The device measures vpm as well as rpm and is available in various ranges between 1000 and 13,000 rpm.

James G. Biddle Co., 1316 Arch St., Philadelphia 7, Pa.

For additional data, request item J-417, using business reply card page 262.

Flame Failure Safeguard for Oil Burning Equipment

For flame failure protection of commercial and industrial oil burning equipment, Fireye Flame Failure Safeguard Type F18T-2 is recommended.

The device consists of a phototube and amplifying system housed in a compact, rugged, dust-tight aluminum case. Special heat-resisting filters and heat insulating fins and spacers serve to thermally insulate the housing from high boiler wall temperatures so that the entire control may be mounted directly on the furnace wall.

Other features include an hermetically sealed time delay element which prevents the relay from dropping out from purely transit flame disturbances; a pilot light indicating flame failure which can be viewed through an angle of 180°, and a cover switch to prevent unsafe operation of the control should the cover be removed.

Combustion Control Corp., 77 Broadway, Cambridge 42, Mass.

For additional data, request item J-136, using business reply card on page 262.

Prefabricated Stainless Steel Dye Tube Spindle Shafting

A drawn stainless steel shape has been developed for producing dye tube spindle shafts which not only simplifies manufacture of spindles, but insures corrosion resistance, it is claimed.

With the drawn stainless steel shape, the only operation required to produce a spindle shaft is cutting the shape to proper length.

Because the smooth, continuous surfaces of the drawn spindle shaft permit complete draining, dye cannot become entrapped to corrode the metal and stain the yarn. Other features of the prefabricated stainless steel spindle shafting are rapid flow of dye through the spindle and rigid four-point support of the dye package. It is available in Type 316 stainless steel for use in sulphuric acid dye solutions, as well as in other grades of stainless for use in less corrosive dyes.

Armco Steel Corp., Middletown, Ohio.

For additional data, request item J-102, using business reply card on page 262.

Rayon Cake Drier Saves Valuable Space

The Stienen Rayon Cake Drier eliminates the necessity of cumbersome space consuming cabinets and trays. The drier consists of a blower, appropriate heater units, and the main body of the drier itself.

Fixed upon the body of the drier are adaptors on which the individual rayon cake is placed. Drying is accomplished by the circulation of heated air directly through the cake. In this manner uniform drying is achieved and the constant circulation eliminates the building up of dormant heat areas which cause a harmful baking effect on the yarn.

This drier may easily be adapted and intergrated with any dyeing or soaking production. The standard unit is of 245-cake capacity and will receive cakes weighing up to 2 lb each, dry weight.

The manufacturer claims that this drier has been perfected so that the drying time of rayon cakes has now been reduced to 5½ hours on actual production basis. This drying time will vary with the denier, the weight of the cakes, or the finishing agent used.

Standard Fabricators, Inc., 355 Walton Ave., New York 51, N. Y.

For additional data, request item J-452, using business reply card on page 262.

Twister Ring Lubricant

A soft consistency grade lubricant, known as Summitlube O, is white in color and is used for light duty service in textile mill twister rings.

The grease is said to withstand high temperatures and return to original consistency even after melting points have been reached.

The Texas Company, 135 East 42nd St., New York 17, N. Y.

For additional data, request item J-284, using business reply card on page 262.

from the Rough to the FINISHED

Bowen-Hunter Manufactures

QUALITY BOBBINS

"True to the Gauge"

Better Performance with
Bowen-Hunter
Quality Bobbins

BOWEN-HUNTER BOBBIN CO., INC.

East Corinth, Vermont

SOUTHERN REPRESENTATIVES: THE McLEOD COMPANIES, GREENSBORO, N. C., AND GREENVILLE, S. C.

Fringe Roll Improves Lap Uniformity

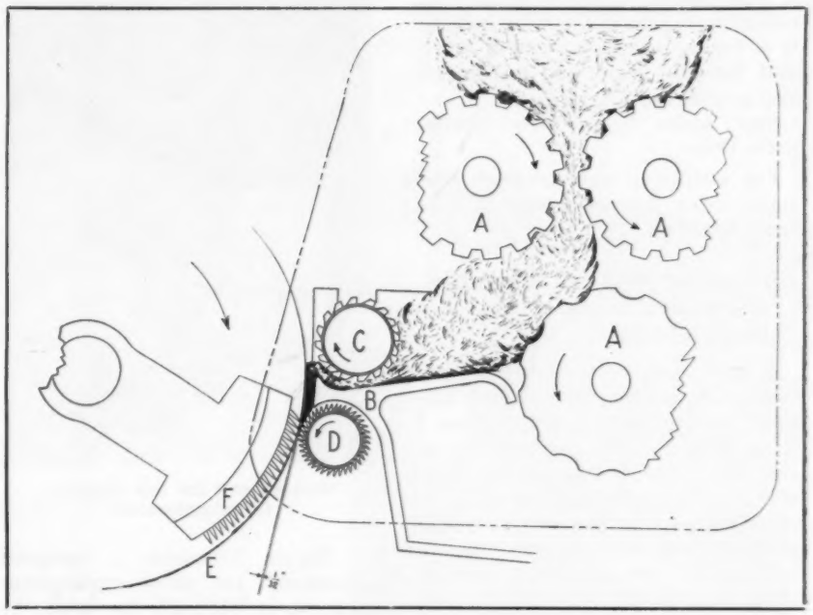
A new arrangement of the feed assembly on pickers incorporates an additional element called the "Fringe Roll." This fringe roll consists of a wire-wound roll which is installed under the bottom feed roll or under the nose of the evener pedal, and is set forward to 1/32" from the path of the beater, with the points of the wire facing upwards toward the edge of the beater blade.

The fringe roll revolves in the same direction as the bottom roll and at a slightly higher speed than the feed rolls. As the beater picks from the sheet of cotton emerging from the feed rolls, it forces the fringe back and down until it comes in contact with the wire-wound roll and is supported by it. As the fringe roll revolves, it carries the fringe of stock forward into the beater, so that the picking action is repeated between the edge of the beater and the surface of the feed roll.

As a result of this extended picking action, the lumps and bunches are broken up and disintegrated, so that the condition of the stock reaching the screens is quite uniform.

Saco-Lowell Shops, 60 Batterymarch St., Boston, Mass.

For additional data, request item J-283. using business reply card on page 262.



Cross sectional sketch of picker feed roll section showing location of fringe roll: (A) delivery rolls from blending reserve; (B) special evener pedal designed to work with fringe roll; (C) evener roll; (D) fringe roll; (E) bottom of beater chamber; (F) carding beater (Saco-Lowell).

Rubberized Wood-Bond One Coat House Paint

A new rubberized one coat house paint recently marketed is reported to be exceptionally high hiding, have excellent gloss retention and to be durable, with appreciable ease of application characteristics. Supplied in white, it can be easily tinted with oil colors.

A major improvement of deeper penetration, high gloss and tougher weathering is claimed for Totrust, a rust-inhibitive paint primer and finish coat combined. Totrust gets into the rusted pits and inhibits rust at its source to control further corrosion.

The Wilbur & Williams Co., Boston 15, Mass.

For additional data, request item J-222, using business reply card on page 262.

New Safety Type Live Roller Conveyor

A new design of live roller conveyor has been announced. The roller actuating transmission consists of a roller chain mounted at one side of the frame, engaging sprockets attached to hexagon through shafts, and this chain provides positive driving of the axles. The result is that with or without a load, the rollers may be stopped by a slight pressure of the hand, and if the line becomes filled with commodities, the bearings simply turn, thus making the rollers stationary.

The safety feature of outstanding value is the entire elimination of a belt running below the carrying roller.

Standard Conveyor Co., North St. Paul 9, Minn.

For additional data, request item J-210, using business reply card on page 262.

Test Benches Feature Variety of Designs

Test benches for use at test stations in textile plants can now be had in any length and in a variety of designs, by joining prefabricated steel units recently developed and now available from stock.

Eighteen different all-steel units are available, including drawers, cupboards, sinks, tables, storage cases, etc. They are designed to be joined easily one to another to form test benches either 30" or 36" high. Units are two, three, four or five feet in length and make use of the newly developed plastic-impregnated stone called "Kemrock" for bench working surfaces.

Fisher Scientific Co., 714 Forbes St., Pittsburgh 19, Pa.

For additional data, request item J-153, using business reply card on page 262.

Dry Lubricant for Extreme Pressure Applications

A new grade of Molykote lubricant, known as Type Z, has been made available. This lubricant is a specially prepared, smooth-textured molybdenum compound powder adapted for extreme bearing pressure applications.

Molykote Type Z resists the attack of all but a few acids, and its lubricating characteristics are not affected by temperature from the sub-zero range up to 750 F, it is claimed. Another feature cited is that it has an affinity for tenacious adherence to metal surfaces, a quality which combined with exceptional film strength effectively prevents galling and seizing at bearing pressures in excess of the yield strength of most metals.

The lubricant may be applied dry

in the powder form or it may be mixed with solvents, oils or greases. It is finding use as a wear-in lubricant for dies, gears, and machinery; also as a thread lubricant.

The Alpha Corporation, Greenwich, Conn.

For additional data, request item J-103, using business reply card on page 262.

Universal Testing Machine Features High Sensitivity

A new type universal testing machine incorporating the unusual features of full load capacities from 2 lb to 5000 lb with a sensitivity of .002 lb to 5.0 lb at the extreme range and a guaranteed accuracy of 0.2% or better for any load range, makes possible the testing of many types of materials on one machine and eliminates the need for a number of testing machines of varying capacities.

According to the announcement, many tests have been conducted, particularly in the textile group, where it was found that breaking load figures were equal to the conventional pendulum machines; further a much lower coefficient of variation was obtained.

United States Testing Co., Inc., 1415 Park Ave., Hoboken, N. J.

For additional data, request item J-217, using business reply card on page 262.

Temperature Transmitter Is Highly Responsive

A new force-balance type pneumatic temperature transmitter called the Taylor Transaire is designed particularly for those applications where it is desirable to have the indication, record or control remotely located from the point of measurement and where it is necessary to have accuracy, high speed of response, small thermal elements and short range spans within the limits of minus 375° and plus 1000°F.

One of the outstanding features claimed for this new instrument is the incorporation of Speed-Act which overcomes the lag inherently present in the response of any form of thermal measuring element.

Other features of the instrument are: (1) more accurate control; (2) unusually small thermal elements; (3) short range spans.

Taylor Instrument Companies, Rochester 1, New York.

For additional data, request item J-623, using business reply card on page 262.

Micarta roll for lap winders (Westinghouse).

Micarta Lap Roll

A lap roll made from Micarta will fit standard lap winders. Micarta is a tough, laminated material that will not chip, dent, or splinter. It is impervious to moisture and consequently does not require a protective varnish coating.

The roll is 46 to 49 per cent lighter than conventional rolls, according to the manufacturer. This fact, coupled with a more rapid pickup of the lap during winding, makes it possible to increase production as much as 15 per cent, as three pounds of additional cotton can be wound on each lap.

Westinghouse Electric Corporation, Box 868, Pittsburgh 30, Pa.

For additional data, request item J-408, using business reply card on page 262.

Improved Size for Nylon Filament Yarn

An improved sizing material for nylon continuous-filament yarn has been announced.

Similar in most respects to the resin textile size formerly offered under the trade-mark "Tyze" 1, the new material has been modified to eliminate dusting and is known as "Tyze" 2 resin textile size.

E. I. du Pont de Nemours & Co., Inc., Wilmington 98, Delaware.

For additional data, request item J-241, using business reply card on page 262.

New Wool Card

The Newport News wool card is a three-card set consisting of a breaker card, intermediate card and finisher card.

An outstanding feature claimed is the low overall height for unobstructed vision over the machine and ready removal of workers and strippers. Close fitting covers are provided for the fancy rolls. The machine will produce a greater yield through minimum loss of stock, it is claimed.

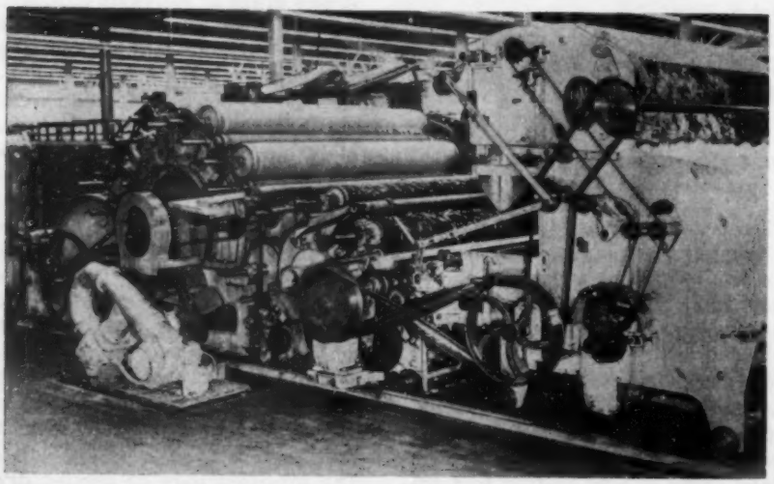
A tape condenser of special design features positive and even division of the web as well as tapes which do not steal from each other.

Each of the card units has a large doffer for better carding.

Newport News Shipbuilding and Dry Dock Co., Newport News, Va.

For additional data, request item J-409, using business reply card on page 262.

Three-set wool card (Newport News).



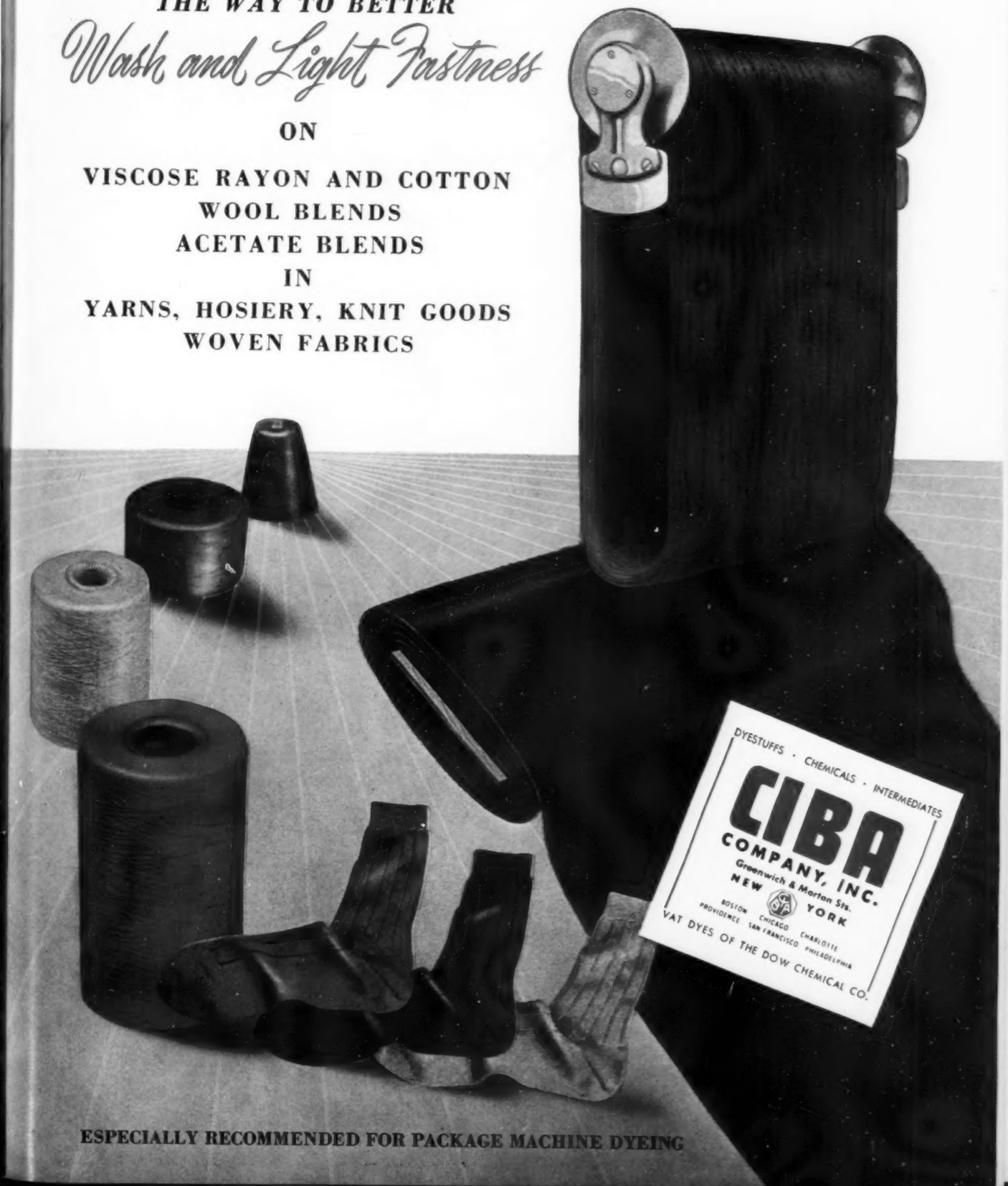
COPRANTINE COLORS

THE WAY TO BETTER

Wash and Light Fastness

ON

VISCOSE RAYON AND COTTON
WOOL BLENDS
ACETATE BLENDS
IN
YARNS, HOSIERY, KNIT GOODS
WOVEN FABRICS



ESPECIALLY RECOMMENDED FOR PACKAGE MACHINE DYEING

BETTER QUALITY...MORE PRODUCTION...LESS REJECTS

All Through the EYES in Your Weave Room!

No, not the human eyes, but the eyes in the heddles you use. They in a large measure determine the Rejects in your finished product.

Today, QUALITY CONTROL is a vital factor in every textile operation. It reduces REJECTS – the nightmare of every mill – enables you to meet customer demands through higher quality production standards. It helps management bring a semblance of balance between ever mounting costs and production schedules.

Leading mills make sure they have Quality Control in the weave room. They standardize on Ste-Hed-Co, the heddles with the Perfect Eye and other features important to achieve quality-production and less rejects. Fifty-one years experience makes them tops in construction, polish and finish . . . try them and see why . . .

"They Weave the World's Needs"

Ste-hed-co

FLAT STEEL HEDDLES

Made of
High Carbon and Stainless Steel

High Carbon Steel with nickle or cadmium finish for cotton, worsted and wool weaving.

Stainless Steel with its many features is indispensable in the manufacture of weaves requiring acetate warp yarn. Rust resistant and easier to clean, stainless steel heddles promote greater efficiency . . . reduce costs.

1-J-6

MANUFACTURERS OF —
Flat Steel Heddles
Loom Harness Frames
Loom Reeds
(Pitch Band and All Metal, Regular and Stainless Steel Wire)
Warp Preparation Equipment
Loom Harness Accessories
Electrode Rods
(Fibre and Plastic Insulation)
Southern Shuttles
(Tempered Dogwood, Persimmon and Fibre Covered)

STEEL HEDDLE MFG. CO.

2100 W. Allegheny Ave., Philadelphia 32, Pa.

SOUTHERN SHUTTLES DIVISION Paris, Greenville, S. C.

Other Plants and Branch Offices

Atlanta, Ga. • Greensboro, N. C. • Providence, R. I. • Montreal, Co

Jet Circulation Piece Dye Kettle

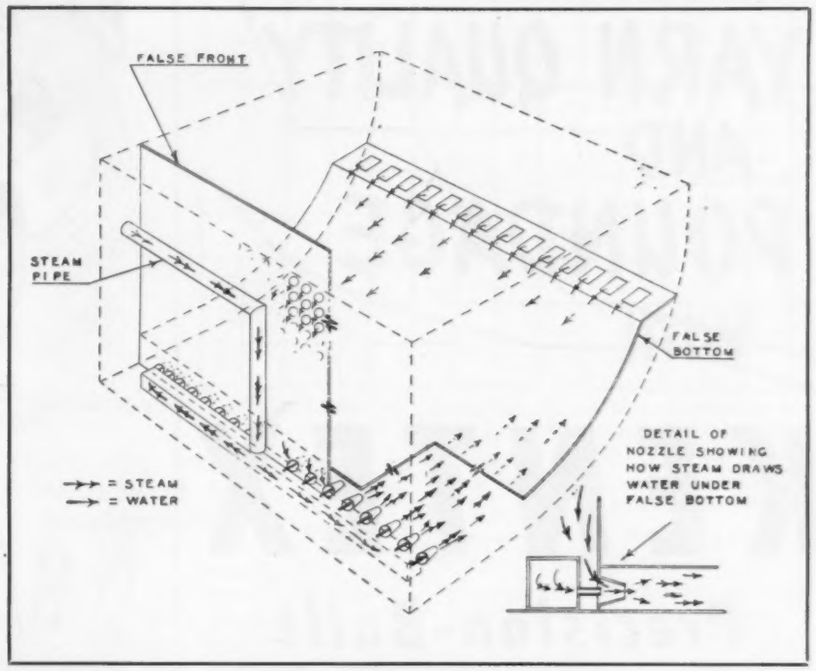
Temperature variations from the front to the back of piece dye kettles are said to be eliminated by the Hunter jet circulation system. Dye kettles equipped with this device show temperature differences amounting to not more than one degree between any parts of the bath, it is reported.

Jet circulation may be installed in existing stainless steel dye kettles as well as new ones. Major component of the system is a stainless steel false bottom and front which provides a passage for heating steam from front to rear of the kettle.

The majority of heating steam is fed into the kettle through a series of nozzles. Each nozzle projects into a cone arrangement allowing the steam jet to act as a pump. Jets draw water along with steam and force the liquid through a passageway formed by the false bottom and the kettle bottom.

James Hunter Machine Company, North Adams, Mass.

For additional data, request item J-292, using business reply card on page 262.



Sketch showing principle of operation of jet circulation piece dye kettle (Hunter).

Heat Exchangers Available from Stock

An extensively redesigned line of mass produced, standardized heat exchangers has been announced. According to the manufacturer, the new type "BCF" is the first shell and tube exchanger to be carried in stock as shelf goods.

For compressors, hydraulic machinery, blowers, and many other industrial applications, the manufacturer claims to have achieved the lowest cost per btu transferred.

Ross Heater & Mfg. Co., 1407 West Ave., Buffalo 13, N. Y.

For additional data, request item J-258, using business reply card on page 262.

Variable Speed Unit Controls Tension and Velocity

Constant tension and control of velocity of web material can be maintained by use of a sensitive hydraulic controlled variable speed unit used in conjunction with a floating roll mechanism.

This arrangement can be employed to keep machines in synchronism or to maintain uniform tension of goods between two machines or two sections of the same machine.

Material such as cloth, rope, etc., delivered from one machine passes over a fixed roll, under a floating roll, over a second fixed roll and into the next machine or wind-up drum. The floating roll is connected to the speed control lever of the hydraulically controlled variable speed unit.

Reeves Pulley Co., Columbus, Indiana.

For additional data, request item J-259, using business reply card on page 262.

Stainless Steel Trucks Available in Stock Sizes

Stainless steel trucks for interplant use are now being manufactured in stock sizes.

The trucks are manufactured with stainless steel end, side and bottom panels, having "V" notch corrugations on approximately 6" centers.

Morris Textile Equipment Co., 99 Lincoln Park, Newark 5, New Jersey.

For additional data, request item J-288, using business reply card on page 262.

New Twin Mangle

A twin mangle combines the water mangle and the starch mangle as one unit. The machine is ball bearing and each nip has a bottom brass roll and a top rubber roll.

Pressure is applied by air cylinders, and units are fitted in each piston rod. Each unit in the piston rods is connected with a gauge so that it may be checked to insure that the same pressure is attained at each end of the top squeeze rolls. With this system it is always possible to reproduce the exact pressure desired on any type or style of cloth.

Birch Brothers, Inc., 32 Kent St., Somerville, Mass.

For additional data, request item J-233, using business reply card on page 262.

Shuttle Eyes for Cotton and Rayon Weaving

Newly developed shuttle eyes for both cotton and rayon weaving have been recently announced. Many of these eyes are reported to be interchangeable in the same shuttle, making possible a saving in shuttle cost on a change in weave.

No. 340, a cast iron shuttle eye with scroll designed to fit any shuttle with the 183-X eye, insures better threading and more positive retention of the yarn in the eye.

A single-piece cast iron eye, No. 347, will replace either of the aforementioned eyes. Instead of the steel scroll, it has two horizontal thread slots below the retaining hook.

For those mills desiring to change from an 8-inch bobbin to 8¾-inch bobbin in the same size shuttle,

STEP UP
YARN QUALITY
AND
POUNDAGE
WITH

KENTEX

Precision-Built APRONS

KENTEX
TRADE-MARK REG.
APRON

Cut to the exact thickness you specify; precision built and micrometer gauged to eliminate dimention variations; made of finest quality bark-tanned or chrome leather—KENTEX APRONS really do *fit better—wear longer* . . . and scores of mills (in which Kentex Aprons have been standard equipment for years), have found they can be depended upon to help produce more *uniform* yarn, and *more* yarn per machine.

Write us today for free samples and prices of Kentex Aprons.

TEXTILE APRON COMPANY

EAST POINT, GEORGIA

J. B. KENNINGTON, OWNER

IN CARD CLOTHING, TOO...
SIZE AND SHAPE ARE IMPORTANT

Whether you need card clothing with round, angular or convex wire, you can be sure that the staples in Wissco Card and Napper Clothing will be accurate and uniform in size and shape. And that's mighty important if cards are to yield maximum production.

As an assurance of quality, Wissco makes and processes its own card wire. Then the smooth, clean-cut staples are precision-set and ground and the finished product is checked under a microscope.

Because Wissco Card and Napper Clothing is built beyond the requirements of average service, it is being relied upon by a steadily growing number of boss carders. A test run on your own machines will prove our claims. Why not write today for detailed information and prices.

Sales Office and Plant: 56 Sterling St., Clinton, Mass.
Executive Office: 500 Fifth Avenue, New York 18, N. Y.
District Offices: Boston, Buffalo, Chicago, Detroit, Denver, New York, Philadelphia.
Pacific Coast: The California Wire Cloth Corporation, Oakland 6, Cal.

Wissco
CARD AND NAPPER CLOTHING

CF&I

FOR COTTON, RAYON, WOOL, WORSTED, ASBESTOS AND SPECIALTIES

A Product of Wickwire Spencer Steel Division of The Colorado Fuel And Iron Corporation

shorter shuttle eyes are available. The shorter eye with scroll is No. 346, and No. 337 is the single-piece eye. Both of these eyes fit the old shuttles.

For shuttles with long bobbins, a spring cover fastened by two through bolts is available to hold the heavy yarn package firmly.

New and improved first-pick tension eyes for silk and filament rayon, and also eyes to replace either of these when changing to spun rayon, have been announced. The new first-pick tension eyes are No. 325 for narrow shuttles and No. 286 for wide shuttles. The eyes for spun rayon are respectively No. 336 for a change from No. 325 and No. 331 in place of No. 286. Nos. 325 and 336 will fit shuttles where No. 317 or No. 319 is being used. No. 286 has no older form.

Draper Corporation, Hopedale, Mass.

For additional data, request item J-242, using business reply card on page 262. Please specify item.

Fire-Retardant Paint

A new fire-rertardant paint and coating that is also non-toxic is now being marketed.

Called Flame-Seal, the new paint is described as easy to handle, comes ready to use, and requires no mixing of special ingredients. It can be applied directly from its original container by brush or spray-gun.

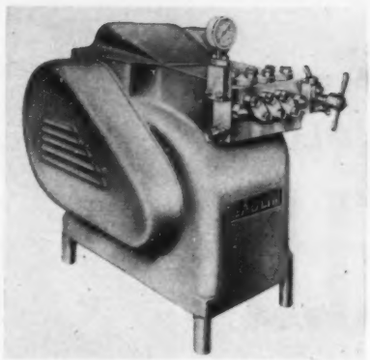
When fire attacks wood which has been coated with Flame-Seal, the paint undergoes a complete transformation. It immediately forms a white crust which creates a hard protective wall at least 8 times the thickness of the original coating, according to the manufacturer.

Sustained exposure to the intense heat of a blow-torch flame on one spot for more than 30 minutes will result in some charring, but at no time will the Flame-Seal coating support combustion, the announcement stated.

The fire-retardant paint is said to be moisture-proof and termite proof, and it will not craze, chip, peel or crack. Moreover, it can be washed with any standard soap or washing powder without lessening its fire-retardant effectiveness. The manufacturer recommends the product for use on all interior raw wood surfaces.

Stallton Chemical Corporation, 8-14 Thirty-Seventh Ave., Long Island City, N. Y.

For additional data, request item J-624, using business reply card on page 262.



Size homogenizer (Manton Gaulin).

Warp Size Preparation Simplified by Homogenizer

A method of preparing warp size has recently been developed which is reported to be a decided improvement over former methods from both operational and economical viewpoints. It is a process in which the size is prepared by means of homogenization.

Homogenization is a comparatively simple process, according to the equipment manufacturer. The standard type of cooking kettle may be used, but instead of heating the starch mixture to a boil, it is heated only to the swelling point of the starch.

As soon as the swelling point has been reached, the heating is stopped and the mixture is pumped immediately into the homogenizing machine. Here it is subjected to pressure and is converted mechanically by shearing action, velocity and impact.

From the homogenizer, the size is pumped directly to the storage kettle or the size box of the slasher.

The homogenizer is said to provide a continuous production of finished size with fewer kettles.

Converting starch mechanically by homogenization produces a more uniform size, it is claimed.

Viscosity can be accurately controlled by the amount of pressure applied in the homogenizer. The amount of starch and softening agents required in the mixture are substantially reduced, according to reports.

Manton Gaulin Mfg. Co., Inc., 44 Garden St., Everett 49, Mass.

For additional data, request item J-300, using business reply card on page 262.

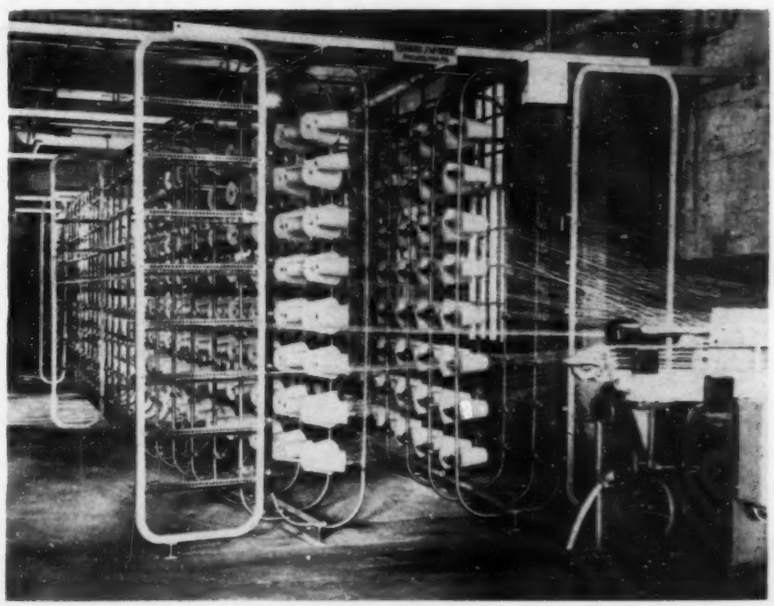
Magazine Creel Has Unique Features

The SRM Magazine Creel features several unique innovations.

A new type patented swinging arm with ball positioning lock combines positive locking with easy turning for quick loading.

Design is such that the same basic units can be assembled either as a silk or rayon system to provide outside loading with yarn coming down

SRM magazine creel (McBride).



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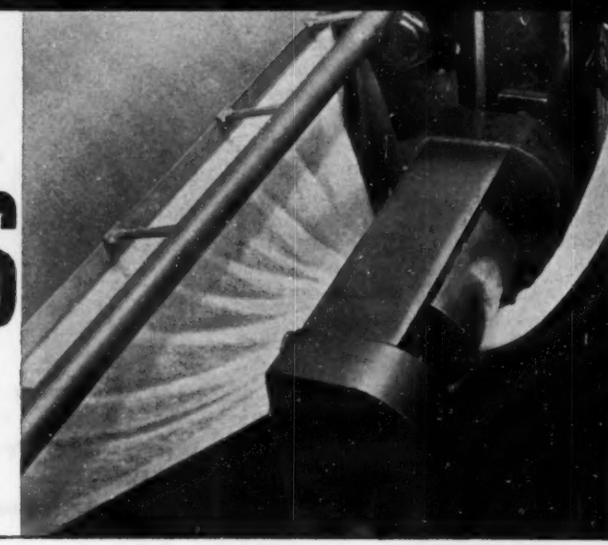
CONSULT THE
CARD-GRINDING SPECIALISTS

DRONSFIELD'S

TRAVERSE WHEEL GRINDER Nº 120



SOLE AGENTS FOR DRONSFIELD'S MACHINERY :-
JOHN HETHERINGTON & SONS INC.
BOSTON · MASS.

SOLID GRINDING ROLLER Nº 112

DRONSFIELD BROTHERS LTD · OLDHAM · ENGLAND

11,900,000 FEET OF *HOLT* MAPLE FLOORING!

REPRESENTED
in the South-East
by Bright-Brooks
Lumber Company
Charlotte, N. C.

Have gone into southern textile mills since 1920—with complete satisfaction to the mill operators.

When you think of floors, remember to specify Holt Flooring, made from Northern Wisconsin-Michigan Hard Maple.

HOLT HARDWOOD COMPANY.. OCONTO, WISCONSIN

the center for draw-off over end, or as a cotton system with inside loading.

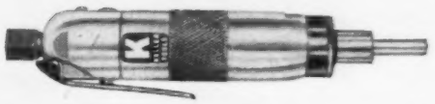
The monorail construction provides complete accessibility for quick, easy cleaning.

Double post, disc type tension units have recessed hex heads for positive adjustment without marring posts. The positive electro-magnetic stop motion is equipped with two-way signal lights—visible from creel or warper——to speed location of broken ends.

The Edward J. McBride Co., Adams Ave. and Leiper St., Philadelphia, Pa.

For additional data, request item J-291, using business reply card on page 262.

NEW PIN RIVETER FOR LIGHT OPERATIONS



A pin Riveter for very light riveting operations with soft-metal tubular and standard rivets, has been marketed.

The riveter is said to be well suited to a variety of special jobs, such as setting small drive screws, driving brads in the assembly of wood and metal, light peening and scaling operations on thin sheet-metal sections and bakelite.

Keller Tool Co., Grand Haven, Mich.

For additional data, request item J-425, using business reply card on page 262.

Hydraulic Drive Easily Installed

The recently announced Hydro-Sheave Drive is specially designed to be used with Worthington Quick Detachable Sheaves made for SB and SD hubs.

This new drive is a conversion device applicable to electric motors in the ¾ to 25 hp range.

When combined with a Worthington QD sheave, the drive is an integrated power transmission package. This package is complete with installation instructions, parts drawings, parts list, and a single wrench required for mounting. The small aluminum hydraulic coupling is filled with hydraulic fluid and all bearings are lubricated for life.

When used with general purpose a-c motors, heavy loads are started easily and accelerated rapidly. This frequently allows electric motors to be filled to the actual running requirements of the job— rather than the starting requirements.

Twin Disc Clutch Co., Hydraulic Division, Rockford, Ill.

For additional data, request item J-221, using business reply card on page 262.

Bramwell Continuous Feeders

A new line of Bramwell continuous feeders features a gently sloped spike apron and a larger size hopper for greater productive capacity.

A variable speed transmission unit in the spike apron drive is said to increase efficiency and flexibility. Improved bearings and a screw conveyor which automatically ejects dirt and foreign matter from a housing under the beater grid lower maintenance costs, according to the manufacturer.

Geo. S. Harwood & Son, Worcester 8, Mass.

For additional data, request item J-247, using business reply card on page 262.

Low-Voltage Static Eliminator

Low - voltage static - eliminating equipment is available for processes where space limitations make it impractical to install high-voltage equipment and also where an individual type eliminator, without external high tension wiring, simplifies installation.

The Model LV Static Eliminator consists of: (1) a power unit hung on a simple bracket which is attached to the machine; (2) one or more inductor bars, one inch inside diameter, with a case of stainless steel; (3) accessories.

Chapman Electric Neutralizer Co., Portland 6, Maine.

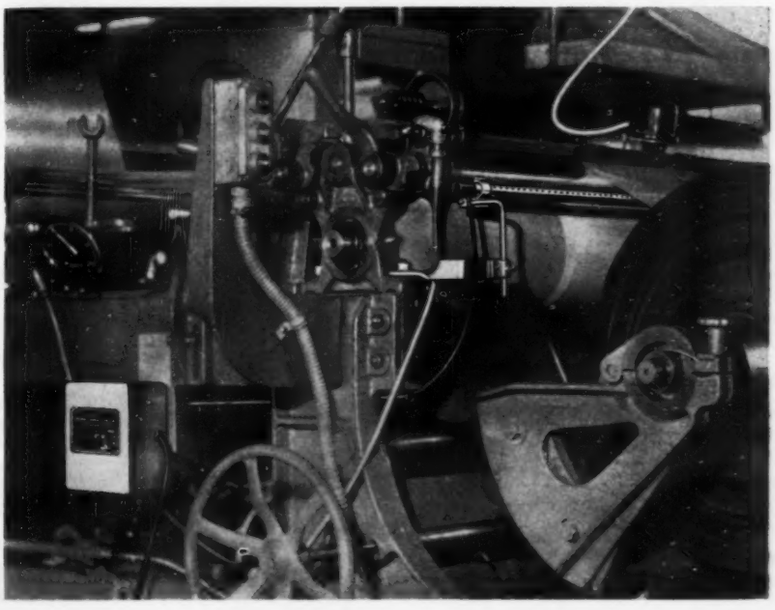
For additional data, request item J-238, using business reply card on page 262.

Tension and Idler Pulleys for Wool Spinning Frames

A self-aligning aluminum tension pulley has been developed for use on Whitin Model A, D and E wool spinning frames.

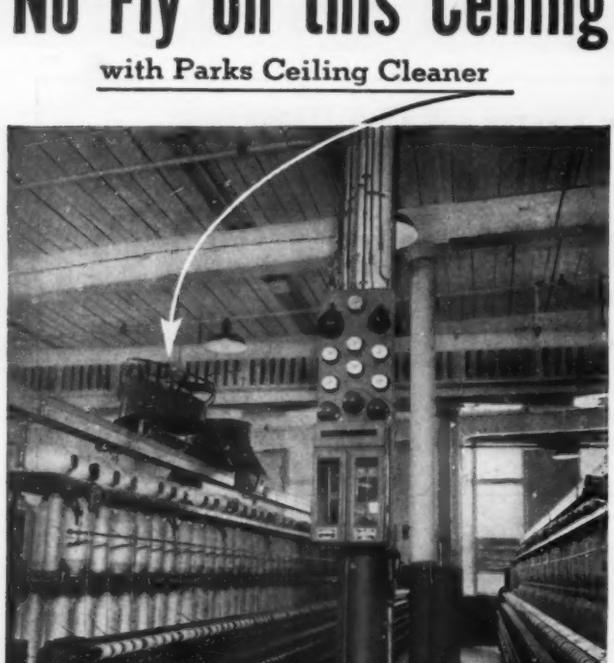
Designed to eliminate tape slip-

Rayon slasher equipped with Model LV static eliminator (Chapman).



No Fly on this Ceiling

with Parks Ceiling Cleaner



Ceilings as clean as frames. No lint or dust. Housekeeping simpler. Operatives happier. Yarns better.

Parks Ceiling Cleaner

A Paying Addition

This addition to mechanical cleaning rounds out the work of ParksTurbo Traveling Cleaner (CT type, track on frames).

Rotating as it travels, each Parks Ceiling Cleaner unit directs its current of air upward. Lint, dust and fly are not allowed to settle on lights, piping, ceiling and things.

Present or future installations of Parks Certified Climate Air Conditioning are not interfered with.

Parks-Cramer Company

Fitchburg, Mass. PARKS Certified Climate Charlotte, N. C.

NEW DAMP-TEX ENAMELS REVOLUTIONIZE INDUSTRIAL PAINTING

DAMP-TEX Regular has no flavor-tainting odor. White is now whiter. It is safe to use around foods. Dries in a few hours. Resists normal alcohol, acid and alkali conditions.

DAMP-TEX No. 2 dries in 30 minutes. Resists extreme acid, alkali and alcohol conditions.

DAMP-TEX IS MORE THAN A PAINT

It's a complete system to stop deterioration due to Rot, Rust, Fungus and germs.

Both Regular and No. 2 DAMP-TEX offer bactericide, fungicide and rust inhibiting pre-treatments. Go on wet surfaces, as well as dry.

DAMP-TEX is easy to apply, dries to a porcelain-like finish with a high, light-reflecting beauty that washes like glass. Lasts for years. Used by more than 8,425 plants.

NO RISK TRIAL OFFER

Just write across your letterhead, the word DAMP-TEX and mail to us. We'll send you details of our no-risk trial offer. Warehouse stocks near you.

STEELCOTE DAMP-TEX ENAMELS No. 1 and No. 2

STEELCOTE MFG. CO. • ST. LOUIS 3, MO.

IN CANADA: STANDARD PAINT & VARNISH CO., LTD., WINDSOR, ONT.

page and frayed selvages, the tension pulley has a 1¼" crown face that keeps the tape on the center of the pulley at all times. Tape life is more than doubled, it is claimed.

Made of cast aluminum accurately machined to 4" diameter and mounted on two Arguto Oilless bearings, these pulleys require no lubrication.

Arguto Oilless Bearing Co., Philadelphia 44, Pa.

For additional data, request item J-403, using business reply card on page 262.

Carbonizing Dryer for Wool Piece Goods

A bottom entry dryer has been developed for carbonizing woolen piece goods. The cloth enters the machine at the second pass from the bottom. Here it comes in contact with air at approximately 180 F. The air in this zone is heated through a heater which is controlled by its own individual temperature controller and passes to its own fan.

The cloth then passes to the next zone of the dryer where the temperature is approximately 210 F. The air in this zone is also heated in an individually controlled heater as in the bottom zone. The third zone has an air temperature of 230 F., and the fourth zone has a temperature of approximately 260 F. Since the low temperature is at the bottom and the high temperature at the top, it is possible to maintain a uniform rise of temperature from bottom to top.

The goods are held on the pins in a flat condition while being dried. The drying and baking time is reduced due to the large volume of air circulated in the dryer.

The dryer has a holding capacity of only 45 yards and can carbonize 18-ounce coverts at 8 yards per minute, which means a drying and baking time of slightly less than six minutes. Ten-ounce goods can be carbonized at 15 yards per minute, giving a drying and baking time of three minutes.

James Hunter Machine Co., North Adams, Mass.

For additional data, request item J-248, using business reply card on page 262.

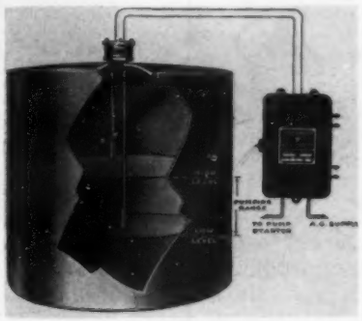
All-Purpose Section Beam for Synthetic Yarns

A section beam for all fine denier synthetic yarns has recently been introduced. The beam is all aluminum except for the steel head inserts and shaft, thus assuring high strength with low weight.

An important feature of the beam is the removable head. Both heads may be detached from the barrel in a matter of minutes in case of accidental damage, and any part of the assembly may be replaced individually. Shafts also are removable, having specially designed journals to permit this feature.

Hubbard Spool Co., 1627 Carroll Ave., Chicago, Ill.

For additional data, request item J-249, using business reply card on page 262.



LIQUID LEVEL CONTROL

A maintenance-free level control has been developed whereby contact with the liquid is made only through stainless steel probe rods. The control consists of an electrical relay operating from a probe circuit through a transformer and a rectifier. Accuracy is independent of temperature and pressure, it is claimed.

Series 10 Level Control is recommended for all electrically conductive liquids, such as acids, salts, nitrates and sulphates. Positive operation is assured by the feature which permits the probe circuit to be set at several different sensitivities to match the electrical resistivity of the liquid being controlled.

As indicated in the sketch, the two probe rods which are wired to the control project into the tank to the levels corresponding to the low point where pumping is to start and the high point at which pumping stops. When the level of the liquid in the tank falls below the lower probe, the level control closes the electrical circuit controlling the pump or valve. When the liquid rises to the level of the upper probe, the fluid acts as a conductor of the minute current at low voltage required for operation of the relay and the central circuit opens.

Photoswitch, Inc., 77 Broadway, Cambridge 42, Mass.

For additional data, request item J-675, using business reply card on page 262.

Automatic Blower and Sweeper

An improved automatic blower and sweeper is designed for work in spinning, spooling, and twisting rooms.

The brush sweeps up in front of the machine while a current of air forces the waste from under the frames and into the next alley.

H. E. Clark, 177 Howard St., N. E., Atlanta, Ga.

For additional data, request item J-240, using business reply card on page 262.

"Cotton Slashing" Off the Press

The series of 21 articles which have appeared in TEXTILE INDUSTRIES by Dr. Paul V. Seydel under the title "Cotton Warp Sizing" has been placed in book form, under the title "Cotton Slashing" and is available to members of the industry.

In addition to the complete series on "Cotton Warp Sizing" which has attracted much interest, the book contains the most comprehensive bibliography on the subject that has been compiled from both books and periodicals, information of specific technical value related to weaving, calculations, tables, a nomograph, forms for checking and keeping records, and other useful information.

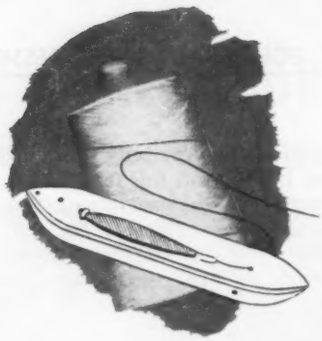
W. R. C. Smith Publishing Co., 806 Peachtree St., N.E., Atlanta, Ga.

For additional data, request item J-260, using business reply card on page 262.

Rotary Fiber Cutter

Uniform lengths of staple fibers can now be continuously cut into predetermined lengths with a new No. 72-E rotary fiber cutter, capable of 500 to 20,000 cuts per minute (single top). The length of cut and speed of machine are easily adjustable during the machine operation.

Four interchangeable rotary cutter heads—three standard with one, two and four blades each, and one



COTTON SILK NYLON RAYON WOOL

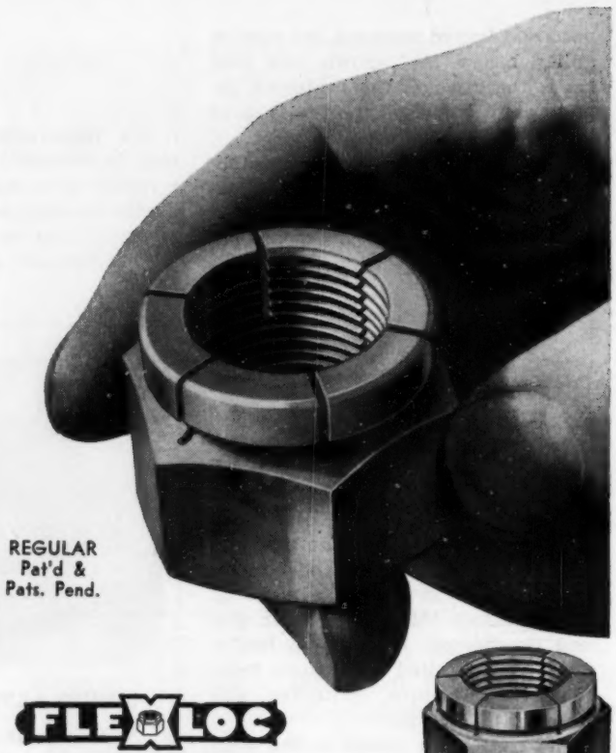
Textile ENGINEERING

Plans and designs for all types of projects related to the textile industry. Appraisals, modernization studies, machinery layouts, air-conditioning, power and water filtration plants, and other phases of textile engineering.

ROBERT AND COMPANY ASSOCIATES

Architects and Engineers
ATLANTA

THIRTY-ONE YEARS' NATIONWIDE EXPERIENCE IN INDUSTRIAL AND TEXTILE DEVELOPMENT



REGULAR
Pat'd &
Pats. Pend.

THIN

FLEXLOC

ONE-PIECE SELF-LOCKING NUTS

. . . WON'T SHAKE LOOSE
. . . REDUCE MAINTENANCE

Invariably, when nuts loosen, they cause shutdowns, loss of production, and bad tempers all around. All this can readily be eliminated by installing the one-piece, self-locking "FLEXLOC", because *it positively will not shake loose* and positively cuts cost of maintenance.

The all-metal, one-piece resilient "FLEXLOC" is becoming increasingly popular, because it is processed to have an exceptionally uniform torque and, because it packs a stop, lock and plain nut all in one. "FLEXLOC" accommodates itself to a wide range of thread tolerances and can be used over and over again without losing much of its torque. And, being a stop nut, it stays locked in any position on a threaded member. It is not affected by temperatures commonly met within the industrial field of Mechanical Engineering.

Available in "thin" and "regular" types —in sizes from No. 6 to 2" in diameter— in NC and NF thread series. Write for your copy of the "FLEXLOC" Catalog.

OVER 46 YEARS IN BUSINESS

SPS STANDARD PRESSED STEEL CO.
BOX 582 JENKINTOWN, PENNSYLVANIA
"Serving Industry continuously since 1903 through Industrial Distributors"

special head for cutting flock—permit a wide range of cuts to closely accurate lengths. Where cuts longer than 8 inches are desired, the manufacturer can modify the heads to accommodate the extra lengths.

F. J. Stokes Machine Co., 5900 Tabor Road, Philadelphia 20, Pa.

For additional data, request item J-261, using business reply card on page 262.

All-Aluminum Precipitron Handles 10% More Air

Development of an all-aluminum model of the industrial Precipitron that can handle a 10 per cent greater volume of air than previous units of the same size has been announced.

There are 99 plates in the new model, compared to 111 in the old, but three inches additional length in each plate gives the new unit 17 per cent more dirt-trapping area.

The new Precipitron is built in two sizes; one 36 inches wide, the other 24 inches wide. The larger unit can clean 1,000 cubic feet of air a minute; the smaller one, 667 cubic feet.

Simplifying and revamping the layout of the plates and dust-charging section will make possible substantial savings in the cost of flushing the collected dust from the plates.

Sturtevant Division, Westinghouse Electric Corp., Boston, Mass.

For additional data, request item J-265, using business reply card on page 262.

Drum Truck Rotates 1-55 Gal. Containers

The problem of low-cost, thorough and safe mixing and agitating of liquids, powders, and various compounds in from one gallon round cans up to 55-gallon drums is solved with the introduction of a compact, portable, motorized drum cradle truck, designated the "Rotator."

A ½ hp enclosed type motor, mounted in balanced position under the truck frame, is an integral part of the Rotator, and furnishes adequate power to the drive mechanism through a small, floating type gear box to rotate a full drum load up to 500 lbs. at speeds of 40, 20, or 10 rpm. One man can safely and easily load and unload a 500-lb. drum weight with the aid of the tipping lever which comes as a part of the complete unit.

Morse Mfg. Co., Inc., 122 Dickerson St., Syracuse, N. Y.

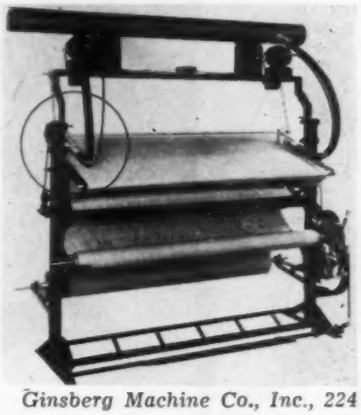
For additional data, request item J-625, using business reply card on page 262.

CLOTH SELVAGE TRIMMER

A new automatic suction thread trimmer is capable of trimming not only loose selvage ends found in all cloth but also closed selvage loops formed by multi-shutte looms.

Designated "Trim-Master," the unit is attachable to any measuring or winding device, and works on the principle of air suction combined with constant-operation electric clippers. The trimming head itself may be adjusted for varying widths and types of fabric.

Advantages claimed for the device include: a sizeable increase in production, quality, cleaned goods, and no cloth damages, all at reduced examining cost.



Ginsberg Machine Co., Inc., 224 Fifth Avenue, New York 1, N. Y.

For additional data, request item J-626, using business reply card on page 262.

Nylon Stripping Agent

Nylon stripping with almost complete dye removal may now be accomplished essentially without damage to the nylon fiber through the use of Textone, a sodium chlorite product.

The new process may also be used for partial stripping. In either case, it is claimed, the chlorite exhibits its characteristic ability to attack color bodies with a minimum degradation of the fiber.

The procedure uses ordinary processing equipment, is faster, and gives more uniform results than other stripping methods, it is reported.

Mathieson Chemical Corp., 60 East 42nd St., New York 17, N. Y.

For additional data, request item J-252, using business reply card on page 262.

High-Speed Tenter Frame

A new high-speed tenter frame features completely enclosed delivery end, heavy one-piece bed plate, steel floor stands and crossheads, totally enclosed drive units, wide parallel rails, large drive sprockets, and anti-friction bearings.

Speeds up to 250 yards per minute are practical with this frame when it is equipped with a No. 11 patented tenter chain. Each clip of this chain is connected to the next one by a standard roller chain link. The drive sprockets and idlers do not touch the body of the clips, thereby assuring quiet operation at high speeds.

Marshall and Williams Corporation, 46 Baker Street, Providence 5, R. I.

For additional data, request item J-253, using business reply card on page 262.

Photoelectric Registration Control

The photoelectric Registration Control Type 23LF3 maintains accuracy in high-speed printing and cutting operations on fabrics, paper, cellophane, or other sheet material. It is recommended for all types of automatic packaging, printing, labeling and cut-off machinery.

The instrument combines extreme sensitivity with high speed operation. The circuit will respond to impulses as short as 1/1000 second, it is claimed.

The split-beam scanning head is most compact. Light source and phototube are served by a single lens, handling both transmitted and reflected light.

Flexibility is provided; the control operates from both opaque and transparent web materials. It controls from either light or dark registration marks. It may be used to control practically any type of correcting means on both continuous and intermittent feed machines.

The use of this registration control

Enables battery hands to handle 25% more bobbins

(Winder Hands 3% to 4%)

Applicable to yarn or warp spinning. Designed for one purpose . . . to eliminate uneven packages and tails. The economy and efficiency of Numo Automatic Spinning Controls have been proved in America's largest textile mills.

- Tail or feeler waste is cut 25% to 35%.
- Spindle chokes are virtually eliminated.
- Saves 3% to 4% of doffer's time, thereby increasing efficiency in spinning and production.
- Prevents overrun bobbins and short doffs, thereby assuring full, uniform packages.
- Reduces number of ends down on doff (rail pulled automatically and mechanically at same speed on every doff).
- Enables women to doff as readily as men.

Uniform packages and tails eliminate the necessity of unraveling long tails and "hunting" for ends. This means less bobbin transfer or breakout, as well as reduction in waste yarn. Return on investment has proven to be 33% to 50%. Write today for illustrated literature showing why more and more mills are turning to NUMO for increased production and lower cost.

NUMO MACHINE & ENGINEERING CO., INC.
CHARLOTTE • NORTH CAROLINA

Floyd Isom Sls C. Box 164 Atlanta, Georgia
Ian M. Haldane & Co. Box 54 London, Canada
Walter S. Coleman P. O. Box 722 Salisbury, N. C.
Barnhardt Bros. Export Corp. P. O. Box 748 Charlotte 1, N. C.
James T. Coleman P. O. Box 1351 Greenville, S. C.

in a printing or cutting operation improves product appearance, reduces spoilage, lowers production cost, increases production rate, according to the manufacturer.

Photoswitch, Inc., 77 Broadway, Cambridge 42, Mass.

For additional data, request item J-627, using business reply card on page 262.

Electrical Differential Speed Drive

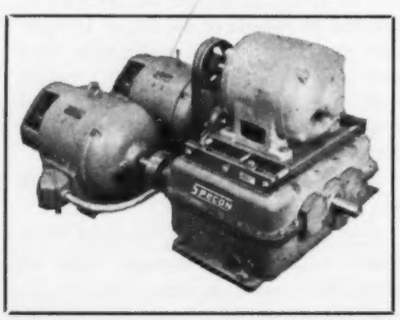
Infinite speed ranges, down to and including zero speed, with constant torque, under fully automatic control, are possible with a newly designed Electrical Differential Speed Drive. In the processing of web materials, constant tension or decreasing tension may be maintained between a machine and a winding stand or between two parts of the processing machine, assuring a smooth, even flow of the material.

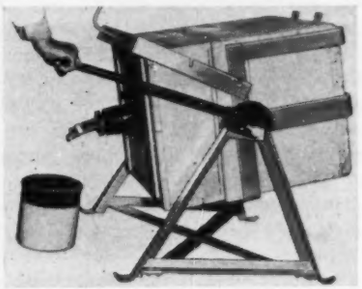
The new drive, designated as Specon ED, makes use of a motor generator combination. The unit consists of a standard a-c squirrel cage motor of any desired voltage and frequency (or any prime mover of constant rpm), two d-c motors and a differential gear box. The a-c motor, or prime mover, is coupled with two d-c motors through the differential gear box. The d-c motors are connected in a closed circuit and require no outside source of power.

In operation, the d-c motors run at varying controlled speeds within a limited 3:1 range and are the means of controlling the torque and unlimited speed range of the output shaft.

When the output shaft is at highest speed, one d-c motor, running at its lowest speed, acts as a generator and feeds its power to the other d-c motor running at its maximum speed. On the contrary, when the

Specon ED (Speed Control).





SAFETY CARBOY TILTER

This Safety Carboy Tilter with pouring spout provides a safe, fast and convenient method of draining acids and other liquids from carboys. It fits carboys of any size. The cradle and supporting base are made of structural steel. All members are riveted or welded to insure a strong, durable unit.

The locking device permits the carboy to be positively held at any angle for pouring so that the whole operation can be done by one man.

General Scientific Equipment Co., 2700 W. Huntingdon St., Philadelphia 32, Pa.

For additional data, request item J-628, using business reply card on page 262.

output shaft is at its lower speeds, the other d-c motor acting as a generator, runs at its highest speed, feeding its power to the first d-c motor, now running at its slowest speed.

One important advantage claimed by the manufacturers is the fact that the ED drive requires no complicated and expensive electronic control panels but, in most cases, attains the required results without the use of electronic tubes.

Speed Control, Inc., Wickliffe, Ohio.

For additional data, request item J-202, using business reply card on page 262.

Non-Slip Material For Covering Stairs

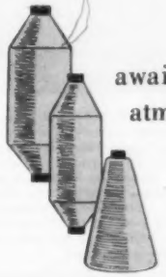
A new type of non-slip material for stairs, ramps, catwalks, building entrances and floors is available. The material, designated Safety-Walk Type B, has a pressure-sensitive adhesive which permits it to be easily applied, according to the manufacturer.

The material consists of hard min-

You'll find friends for textiles in Texas

. . . and some of your best friends will be the men and women you employ. Texas workers are different — their attitude toward their jobs reflects the vigor of their great state. They are proud of Texas' industrial progress, they want to cooperate in the building of a greater Texas. Most of them can tell you — and will at the drop of a hat — that Texas produces the raw materials of the textile industry in superabundance: 33% of U. S. cotton, 23% of U. S. wool, 94% of U. S. mohair. They'll point out that natural gas furnishes economical, efficient, clean power for your mill. And much more.

There's no doubt about it. *Good fortune* awaits the textile mill that builds in the friendly atmosphere of the Texas Gulf Coast. Why not make it yours?



Write, wire or telephone The Houston Pipe Line Co., Houston, Texas for a detailed survey, or special information. Or visit us this month; it will be a real

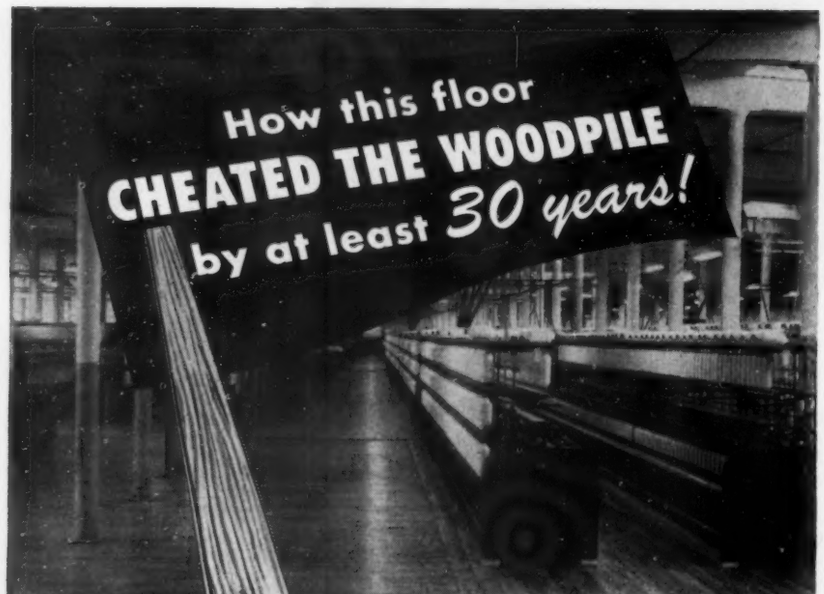
HOUSTON PIPE LINE CO.

Subsidiary of Houston Oil Company of Texas — GEO. A. HILL, JR., President

Wholesalers of Natural GAS

Good fortune awaits textiles in Texas:

Raw fibres — (33% of U. S. Cotton, 23% of U. S. wool, 94% of U. S. mohair) • unsurpassed rail and water transportation • a fine, mild climate • excellent industrial relations • an abundant supply of economical, efficient *natural gas* for fuel.



Tennant-maintained floors at Bates Mfg. Co., Lewiston, Me.

A typical example of results you can get with the...

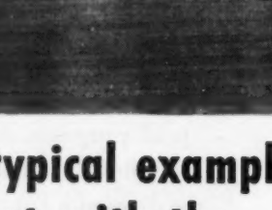
TENNANT FLOOR MAINTENANCE SYSTEM

Transformed like magic, this 30-year-old floor —once dark, rough and spongy from scrubbing—is now good for another 30 years. Saved from costly, premature replacement, it's been made bright, smooth and durable again—by low-cost reconditioning with the TENNANT System.

RECONDITIONS your floors. Gets rid of dark, rough, oil-soaked fibers . . . provides a smooth, bright, new-wood surface.

HARDENS floor surface by special sealing process . . . fills, binds and toughens fibers to resist dirt penetration.

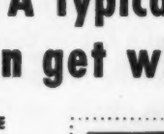
DRY CLEANS; ends scrubbing! Avoids muss, saves manhours, reduces accidents . . . assures cleaner floors at LESS COST!



YOUR FLOORS STAY CLEAN longer when dry-cleaned instead of scrubbed! With this Tennant Floor Machine, dirt, grime and traffic stains are whisked off and picked up in 1 operation. Leaves smooth, hard, dirt-resistant surface . . . only daily care needed is fast, easy sweeping with dry cotton mop. No muss; easy to use; keeps floors looking like new.

- **Reduces floor cleaning costs.**
- **Makes floors easy to clean.**
- **Prolongs floor life, aids safety.**

G. H. TENNANT CO.
2585 North 2nd Street
Minneapolis 11, Minnesota



Write today! Ask for "New Floors From Old" article; also "Textile Floor Maintenance" bulletin, etc.

TENNANT FLOOR MAINTENANCE System

Established 1870

OFFICES IN PRINCIPAL CITIES

eral grains surface-coated on a toughened fabric, affording non-slip safety underfoot. Made in red, green, silver and natural black, Safety-Walk is provided in factory cut stairway strips, brick-size cleats, tile-size cleats, larger all-purpose cleats, and in roll form.

Minnesota Mining & Manufacturing Co., 900 Fauquier Street, St. Paul 6, Minn.

For additional data, request item J-629, using business reply card on page 262.

Compartment Washer

A Compartment Washer is a unit construction machine and can be furnished in any number of compartments. This unit type construction is said to make the new washer one of the most flexible machines in operation. It can be used in range operation, synchronized with other finishing machinery, or it can be operated independently on washing, processing or dyeing.

Different weights of cloth can be run through the washer without "scrimping in" or damaging the goods. Compensating rolls in each compartment have individual drives to control speed and tension during washing operations.

H. W. Butterworth & Sons Co., York & Cedar Sts., Philadelphia, Pa.

For additional data, request item J-282, using business reply card on page 262.

Platen on Hand Truck Simplifies Baling

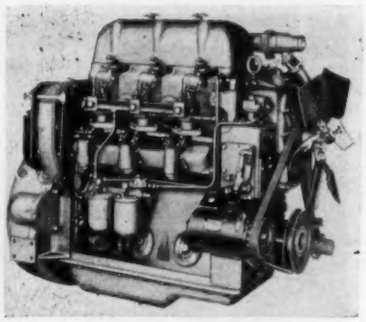
Development of a baling press platen on wheels that saves handling time of both baled and unbaled goods and reduces the physical work of baling, has been announced.

A standard bottom platen from a bale press is mounted on a hand truck chassis in place of the usual flat bed. The use of the platen permits the strapping of the bales while the truck is in the press.

It is necessary, of course, to place the burlap bale covering on the truck before loading the folded goods preparatory to taking it to the press.

Nutting Truck & Caster Co., Faribault, Minn.

For additional data, request item J-256, using business reply card on page 262.



Diesel power unit (Harnischfeger).

New 2-Cycle Diesel Engines

A new diesel power unit, operating on the 2-cycle principle, combines the advantages of medium and high crankshaft speeds, satisfactory piston speeds, and an overall lighter weight unit.

The outstanding features claimed for the unit are the interchangeability of the numerous parts and the patented cylinder head and liner assembly. Each cylinder is an independent, fully water jacketed assembled unit which provides a great saving in time when maintenance is required, thus reducing the cost of major overhauls.

The engines are full diesels employing the two stroke principle, with a bore of 4.5 inches and a stroke of 5.5 inches and having a displacement of 87.5 cubic inches per cylinder.

Harnischfeger Corporation, Diesel Engine Division, Port Washington, Wisconsin.

For additional data, request item J-630, using business reply card on page 262.

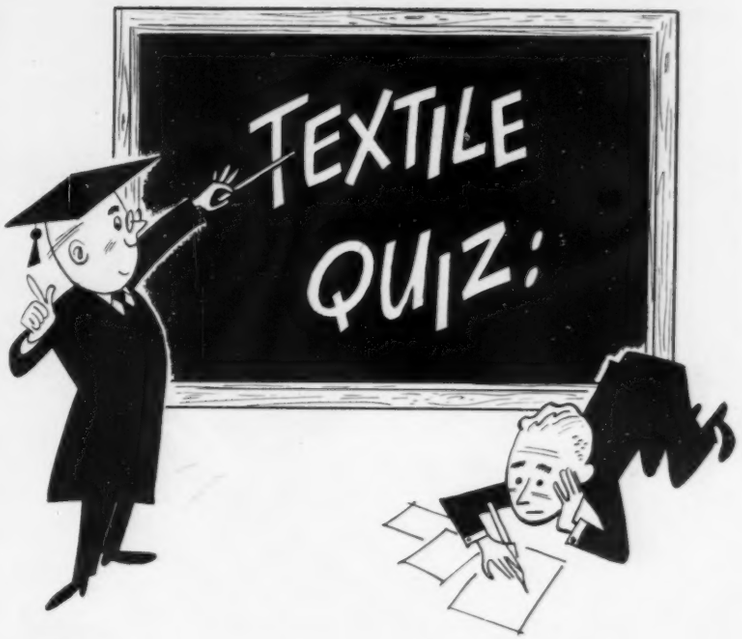
Instrument Counts Picks Instantly

The Micro-Line Counter instantly and accurately determines the number of warp ends and picks per inch. It consists of multiple layers of transparent plastic, surrounded by a satin-finished brass or gold-plated metal frame.

When the counter is placed on a fabric, the inscribed lines on the device produce a lens-sharpened, intense moire pattern against the body of the underlying material. Where the moire lines converge, the exact count of the fabric is read on the scale.

Micro-Lite Co., Inc., 44 W. 18th St., New York 11, N. Y.

For additional data, request item J-255, using business reply card on page 262.



Q. What's the best way to get needed spinning frames?

A. Contact Comer!

Buying or selling textile machinery — any type from opening to finishing—requires contacts, both with those who want to buy and those who want to sell.

Comer Machinery has those contacts. Whatever your needs Comer can help you to more profitably dispose of excess machinery—or to buy needed equipment more economically.

From a single piece to the liquidation of an entire mill—two generations of experience makes contacting Comer the simplest solution to your machinery problems.

Call, wire or write Comer today.

"SALES AROUND THE WORLD"

COMER MACHINERY COMPANY

Cable Address: COMACH

308 Ivy Street, N. E.—Atlanta, Georgia, U. S. A. Tel. Cypress 2505

SECURING WARP ENDS with "SCOTCH" Textile Tape No. 300 at Textron, Inc., East Greenwich, R. I. Easy-to-apply tape speeds accurate holding of threads during transfer and threading-in on Tricot knitting machines.

Textron's* Threads Stay Put with Tape

Usual methods of fastening warp threads at Textron slowed down operations, often required unusual operator skill.

Time-motion tests proved "SCOTCH" Textile Tape No. 300 does a better job, faster. Now, Textron uses this amazing new tape to speed many production operations.

This is only one of many "SCOTCH" Textile Tapes built to industry specifications—designed to save you time and money. Why not let one of our tape engineers show you these profit-building short cuts?

Write us today for complete information. No obligation.

*Reg. U.S. Pat. Off.

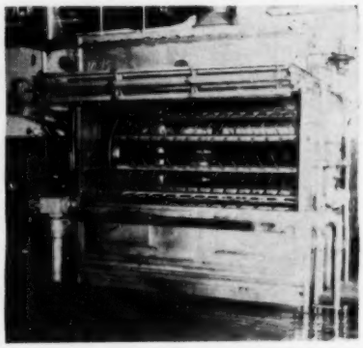
FREE FOLDER illustrates how "SCOTCH" Textile Tapes simplify and improve production operations. For your copy write Dept. TI-10.

QUICK FACTS ABOUT "SCOTCH" TEXTILE TAPE No. 300

- **FAST** — goes on with finger pressure, no special equipment needed.
- **NEAT** — will not injure any fabric, removes cleanly from all materials.
- **STRONG** — adhesive tailored to hold heavy or fine thread. Tough paper backing.
- **ECONOMICAL** — saves labor time, eliminates many former wastes.

ANOTHER 3M COMPANY PRODUCT

Made in U. S. A. by **MINNESOTA MINING & MFG. CO.** ST. PAUL 6, MINN.
also makers of other "SCOTCH" Pressure-Sensitive Tapes, "UNDERSEAL" Rubberized Coating, "SCOTCHLITE" Reflective Sheeting, "SAFETY-WALK" Non-Slip Surfacing, "3M" Abrasives, "3M" Adhesives.
General Export: DUREX ABRASIVES CORP., New Rochelle, N. Y.
In Canada: CANADIAN DUREX ABRASIVES LTD., Brantford, Ontario



Herringbone-hump reel (Hunter).

Herringbone-Hump Reel

A new type of stainless steel herringbone-hump reel for piece dye kettles has been developed. The reel consists of a stainless steel shaft and the usual head on each end with connecting bars running between. Welded to these connecting bars are rows of curved stainless steel rods. These rods are placed at an angle with the axis of the reel and with each row made alternately right and left hand.

The unique herringbone design of the reel is reported to be especially effective in opening all types of cloth, due to the undulating action on the cloth as it passes from hump to hump. This action is said to eliminate chances of the goods running in one fold with resultant streaks and kettle cracks, as well as to eliminate channeling.

According to the manufacturers, the reel has been found particularly valuable in dyeing gabardines in which an opening action of the cloth is desirable and where it is essential that the goods do not slip. It has been described as a universal reel for all of the fabrics which would be run in a woolen or worsted mill.

James Hunter Machine Co., North Adams, Mass.

For additional data, request item J-631, using business reply card on page 262.

Discharge Check Valve

A discharge check valve has been designed that is said to protect against contamination of liquids, fouling of pumps and equipment, reduce maintenance costs and prevent production difficulties in industrial plants wherever back surge is a problem. The valve is recommended for use in discharge lines carrying steam, sludge, waste water, and

many other waste liquids in gravity flow installations.

To minimize fouling of the valve, a swing check flap is suspended from a full floating pin fulcrum to insure positive full surface contact between ground face of flap and flap seat. The knob in the center of the top surface of the swing check flap contacts the valvebody roof at only one point when the swing check flap is wide open.

J. A. Zurn Mfg. Co., Dept. Z-8, Erie, Pa.

For additional data, request item J-632, using business reply card on page 262.

Cartridge Type Demineralizer

A new cartridge model demineralizer which will produce a guaranteed effluent water equal to distilled water or better, at a fraction of the cost, has been marketed. The flow capacity of the unit is from 5 to 8 gallons per hour.

The device is self-contained and the cartridges are easily replaced. No heat or steam is required to operate this unit and the water delivered is free from calcium, magnesium and heavy salts. The cartridge comes packed with 4-bed activated ion exchange resins and has a capacity for removing approximately 1100 grains of dissolved ionizable minerals, expressed as $CaCO_3$, before becoming exhausted.

Penfield Mfg. Co., Inc., Meriden, Conn.

For additional data, request item J-633, using business reply card on page 262.

Abrasion Tester Features Unique Abrading Action

An abrasion testing set, designated Model No. 100-109, incorporates a unique rotary abrading action on a 4" specimen. The wear results from alternately rubbing the flat faces of two resilient Calibrase wheels over the surface being tested.

Features include improved suction pump with vertical dust receiver with swinging nozzle fully adjustable for any thickness of specimen.

The control panel is equipped with an adjustable timer to provide a test period of 1000 cycles, or less, and then automatically shuts off the power, permitting the operating technician to be otherwise engaged

THE
Easy-to-handle
GEARED
PIPE
THREADER

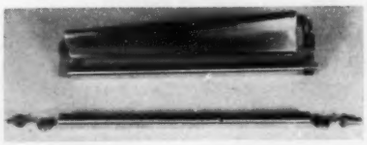
RIDGID No. 4P's handles take the struggle out of carrying and putting on pipe

● Even when you feel like a Tarzan you appreciate the sensible balanced loop handles that make the 4P easy to pick up, carry and work with. Mistake-proof workholder sets to size *before* you put it on pipe, one screw to tighten, no bushings. 4 sets of 5 high-speed steel chaser dies give clean accurate threads on 2½," 3," 3½" and 4" pipe. Ratchet handle furnished—RIDGID Universal Drive Shaft and Power Drive available for power-threading. For perfect threads easily, order the RIDGID 4P from your Supply House.

RIDGID
WORK-SAVER PIPE TOOLS
THE RIDGE TOOL CO. • ELYRIA, OHIO

NEW ROLLER BAIL FOR PINEAPPLE CONING ATTACHMENT

A new Roller Bail has been developed for the pineapple coning attachment used on the No. 50 Precision Winder. This roller bail is designed to lower maintenance and increase the quality of the winding.



Since the bail revolves upon shielded ball bearings which require neither oiling nor readjustment after the initial installation has been completed, maintenance is lowered. The bail also revolves more freely on these bearings; consequently, the quality of the winding is improved.

The ball bearings are protected from dirt and fly by means of a flange on the studs which are used to attach them to the bail holder.

Universal Winding Co., Providence 1, R. I.

For additional data, request item J-430, using business reply card on page 262.

in tabulating results or preparing new specimens without concern of overrunning the test being made.

Taber Instrument Corporation, 111 Goundry Street, North Tonawanda, New York.

For additional data, request item J-268, using business reply card on page 262.

Protective Coating System for Metals

A new type of protective coating system for metals has been announced.

Called the "Metalast" system of painting, it is applicable to all metals to resist all types of corrosion, fouling, and abrasion. It is able to withstand the effects of even the most severe acids, chemicals and salts for long periods of time, according to the manufacturer.

The quick drying properties of the finishes enable almost uninterrupted application on the metal with a minimum lay-up time. Unaffected by temperatures up to 200 F, it can be applied in atmospheric temperatures ranging from 5 F to 90 F.

Metalast finishes possess among other qualities absence of odor, taste, and toxicity; extreme chemical inertness, excellent toughness and flexibility; non-inflammability; good clarity; and a remarkable resistance to age and weathering.

The application of the coating system is comparatively simple. To begin, all metal surfaces are cleaned free of old paints, oil, grease and loose rust; then Metalast is applied by brush or spraying.

First a washcoat primer is applied as a single coat that serves as an anchor for subsequent coatings on the metal. Secondly, there is Metalast anti-corrosive which provides a tough barrier coat with tight inner coat adhesion and which is highly resistant to exterior corrosive elements; and last, is the Metalast topcoat which varies with color desired and usage.

C. A. Woolsey Paint & Color Co., 229 E. 42nd St., New York, N. Y.

For additional data, request item J-634, using business reply card on page 262.

Special Short-Turn Models of Electric Fork Trucks

Designed for increased maneuverability and faster handling of materials in confined storage areas, special short-turn models of electric battery-powered fork trucks feature reduced turning radii.

Redesign of the trucks' battery compartments and counterweights to provide angled corners has reduced the turning radii by 6½ inches on the 2000-pound truck, 6¼ inches on the 4000-pound truck and 6 inches on the 7000-pound truck.

Clark Equipment Company, Industrial Truck Division, Battle Creek, Michigan.

For additional data, request item J-144, using business reply card on page 262.

New Liquid Plastic Protective Finish

Phenoplast is a new liquid finish which, according to reports, not only "coats" the surface but becomes practically an integral part of the material to which it is applied.

Tough, rugged and transparent, Phenoplast gives woods, metals, steel, tile, masonite and composition materials a high degree of surface protection, the manufacturer claims. Its high resistance makes it possible to withstand temperatures from below zero up to the boiling point and higher. Unaffected by acids and solvents, as well as water, gasoline, oils, alkalies, salt spray and strong brines, it penetrates and hardens as a physical part of a porous surface. With a companion undercoat, this same adhesive quality can be given to nonporous surfaces.

It is believed that the product will find many applications in the textile industry. Possible uses include: floor finishing; bobbin and spool finishing, etc.

L. Sonneborn Sons, Inc., 80 Eighth Ave., New York 11, N. Y.

For additional data, request item J-635, using business reply card on page 262.

Industrial Circuit Breaker

A line of Type DB 600-volt d-c or 250-volt a-c circuit breakers with accurate tripping characteristics for low-voltage power distribution in industrial plants, motor starting duty, and the like, has been announced. Accurate control for long time delay with protection from tampering is provided by a unique time-delay element assembled in a hermetically sealed tube.

The DB breakers are said to be easily maintained. Conducting parts are assembled on a molded insulating base which is mounted on a metal base for rigidity. Complete shielding of live parts assures safety. Attachments and parts can be removed or added without drilling or moving other parts.

Breakers are available for overcurrent protection with delayed and instantaneous tripping for use on motors and for general purposes, or for overcurrent protection with both long and short delay for proper coordination in selective protection on fault current.

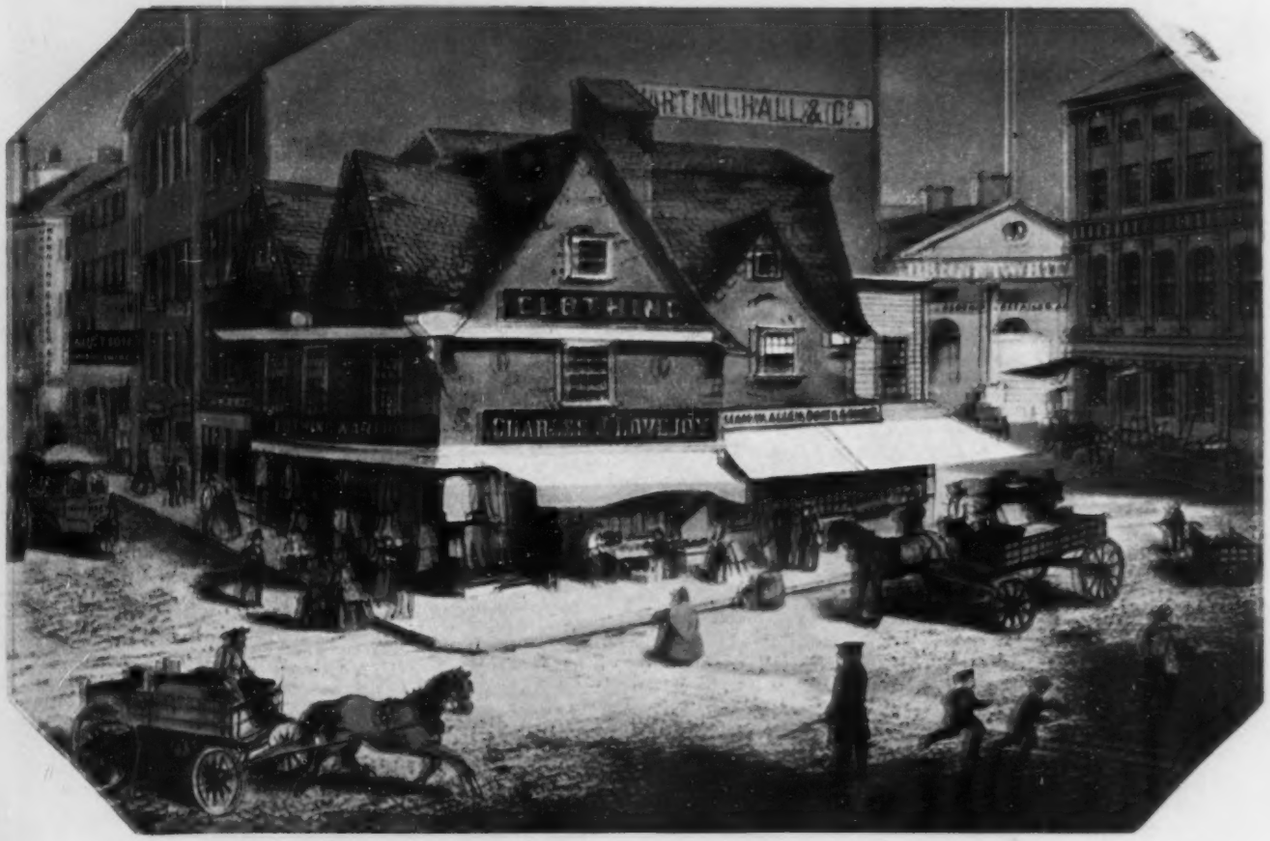
Westinghouse Electric Corporation, P. O. Box 868, Pittsburgh 30, Pennsylvania.

For additional data, request item J-636, using business reply card on page 262.

At wholesale and retail trade levels, the wide variety of new styles and sizes causes great merchandise risks.

THE ISELIN DIARY, 1868

THE BETTMANN ARCHIVE



Putting Stock in the Future?

Readying new wares for each season, manufacturers in 1868 put a lot of stock in the future. Many found financial aid and security against unforeseeable risks in Iselin's Factoring service, already 60 years old . . . Today, without incurring an obligation to be repaid in the future, you can obtain funds and eliminate credit risks through Iselin's service. It will help you build seasonal inventories for sale to your customers, and broaden your distribution with security . . . Our methods are based on 141 years' experience in bringing success to our clients. Use them to expand profitably and safely. Send for booklet on our Factoring service to industry.

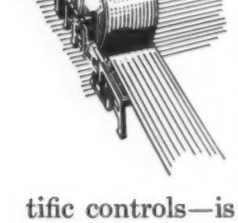
William Iselin & Co., Inc.

357 Fourth Avenue, New York 10, N.Y.

FOUNDED IN 1808

STALEY PRECISION-MADE STARCHES INSURE THESE THREE BENEFITS ...

1. *Uniform* SIZING
2. *Better* WEAVABILITY
3. *Improved* FINISH



Why not let Staley's highly skilled laboratory technicians recommend without extra cost to you, correct starches for ALL your sizing requirements? Staley's complete line of modified and unmodified Corn Starches—guarded for uniformity by rigid scientific controls—is acclaimed by leading textile manufacturers for consistent high quality and dependability. Let Staley work with you in eliminating forever your sizing problems, just as this company has cooperated with others for more than a quarter of a century. Write Today for more details!

Dependable Service from these Points—

ATLANTA, GA.
BOSTON, MASS.
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DURHAM, N. C.
GREENVILLE, S. C.
NEW YORK, N. Y.
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SAN FRANCISCO, CAL.
SPARTANBURG, S. C.

Staley's CORN AND SOY BEAN PRODUCTS

STALEY "ECLIPSE" MILL* AND PEARL STARCHES

*THIN BOILING

A. E. STALEY MFG. CO., DECATUR, ILL., U.S.A.

Continuous Bleaching Unit for Small Plants

A new single stage bleaching unit, known as the Butterworth "Junior" Bleaching Unit, has been announced. High speed, continuous bleaching of knit goods or cotton piece goods can now be accomplished in an area 13 feet long and 16 feet wide. The machine handles cloth at an average of 50 yards per minute.

Outstanding features claimed are the new "U" type washers and saturators made of stainless steel with round corners. The machine is a complete operating job fully equipped with squeezers, washers, saturator, J-box, reels, motors, instruments and auxiliary equipment.

Compared to kier bleaching the unit saves up to 75% in steam and 10% in chemicals, according to the manufacturer. Only one man is needed to run the unit.

H. W. Butterworth & Sons Co., York & Cedar Sts., Philadelphia 25, Pa.

For additional data, request item J-235, using business reply card on page 262.

"Karbate" Heat Exchanger

Recently announced is the "Karbate" seven-tube impervious graphite shell and tube heat exchanger, Series 70A. The basic elements of the unit may be converted from a single pass to a double pass unit by a simple change of covers.

The new exchanger can more readily be adjusted to varying rates of flow and amounts of liquid handled. Two sizes, having effective outside tube areas of 16.4 sq. ft. and 24.6 sq. ft. are carried in stock.

National Carbon Company, Inc., 30 East 42nd Street, New York 17, N. Y.

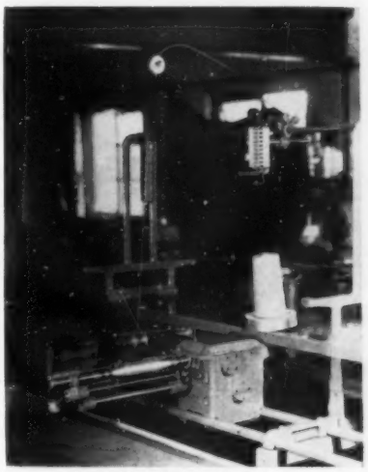
For additional data, request item J-637, using business reply card on page 262.

Pressure Plug Seals Tight Without Sealing Compound

A new socket pressure plug that seals pressure-tight without the use of sealing compounds has been announced by the manufacturer. Featuring the "Dryseal" pipe thread originally developed for use with SO_2, ammonia, and other refrigerants, the Unbrako Dryseal-Thread Pressure Plug is said to offer a solution to leakage problems in high-pressure equipment of all kinds.

Standard Pressed Steel Co., P. O. Box 582, Jenkintown, Pa.

For additional data, request item J-638, using business reply card on page 262.



Foster-Muschamp "Fillwinder" (Foster Machine).

Foster Machine Co. to Build British Type Filling Winders

The Foster Machine Company, Westfield, Mass., manufacturers of cone and tube winders, has concluded arrangements with Muschamp Taylor Limited of Manchester, England, to manufacture and sell in the United States the full line of filling winders now being produced by Muschamp Taylor in England. Pending the setup of production lines for the Foster-Muschamp machines, as they will be called, Foster will immediately begin selling and servicing the Foster-Muschamp machines, and will carry a complete stock of parts.

Three types of machines are included:

1. The Foster-Muschamp "Autofill," an automatic four spindle winder, usually furnished in machines of 20 to 40 spindles, is extremely flexible in that it is easily adjustable for different sizes and types of bobbins and will handle cotton, wool, worsted and synthetic yarns.

2. The Foster-Muschamp "Fillwinder" is a semi-automatic high speed filling winder furnished in machines of 20 individual winding heads. It is usually built as a spindleless machine but spindle equipment can be applied if required. Despite spindle speed in excess of 6,000 rpm the winding start is slow enough for the finest yarns, it is claimed.

3. The Foster-Muschamp "Superfill Winder" is a high speed machine to produce coreless filling packages of coarse yarn. Winding at over 500 feet per minute, high density packages are produced with two to three times the yardage contained in the average direct spun filling bobbin. Bottoms are available where the packages are to be used in the regular bobbin type shuttle.

Foster Machine Co., Westfield, Mass.

For additional data, request item J-639, using business reply card on page 262. Please specify item.

Dye Kettle Controller

A new Dye Kettle Controller provides the flexibility and precision required for modern piece dyeing. With it the dyer can select the starting temperature and time.

Having selected these, the dye liquor can be rapidly heated to starting temperature by moving the selector switch to "hand." The automatic portion of the cycle begins when this switch is moved to automatic. The temperature is increased at the preset rate until the dyeing temperature is reached. At this point

SYNTHETIC LOOM BINDER COVERING

A new synthetic fibrous loom binder covering (shown installed here) is said to have a number of advantages over natural materials.

The new material, designated CN-1, is reported to be less susceptible to temperature and humidity changes, necessitating less frequent binder adjustments; friction of CN-1 is constant over its full life; it wears smoothly and evenly, thus minimizing filling breaks; and it has long life.

Armstrong Cork Co., Lancaster, Pa.

For additional data, request item J-416, using business reply card page 262.

For 50 years TEXTILE INDUSTRIES has served the textile manufacturing industry faithfully. It is read by more mill men in the United States than any other textile publication.

It heads the list of many advertisers wanting to cultivate their share of this attractive market because T.I. provides maximum coverage at minimum costs.

TEXTILE INDUSTRIES

806 PEACHTREE ST., N.E. ATLANTA 5, GA.

timing is automatically started and the temperature is maintained at the desired level until timing is complete when the steam valve is closed.

At the end of the cycle the dyer can examine the results. If further time is needed the mere setting of the timer dial to any desired point turns on the steam and again the temperature controller insures the correct dyeing temperature.

Throughout the dyeing cycle signal lights indicate its progress. Precise temperature regulation is assured by a throttling control system which smooths out the variation experienced with on-off control, and prevents overshoot. The unit is simply constructed and easy to set by means of convenient knobs.

Brown Instruments Division, Minneapolis-Honeywell Regulator Co., Wayne and Roberts Aves., Philadelphia 44, *Pa.*

For additional data, request item J-127, using business reply card on page 262.

General Purpose Lubricant Features Stability

Norma G-66 "Stability-Tested" Grease is now available to users for bearing lubrication. According to the manufacturer, this specially compounded grease is highly resistant to oxidation in storage as well as in service; it is insoluble in water and will not emulsify or aerate in the presence of condensed moisture.

The grease is offered for lubricating grease-packed bearings as well as unsealed bearings. It is supplied in tubes for convenient servicing of bearings in the plant and field, and in larger containers where greater quantities of grease are required.

Norma-Hoffman Bearings Corp., Stamford, Conn.

For additional data, request item J-640, using business reply card on page 262.

Custom-Built Electric Air Filter

Electric air filters custom-built to handle any desired air volume are now available. The filters will remove 90% of the dust, dirt, lint, soot, smoke, pollen, oil mist and airborne bacteria from air streams passed through them, according to the manufacturer. When a unit is installed into the duct work of air circulating or air conditioning systems, mills are assured of uniform

Electric air filter (Trion).

high quality yarns, protection of high speed machinery, and higher employee efficiency, it is claimed.

The filter consists of three major parts: the ionizing-collecting cell of fine tungsten wires suspended in front of and between a series of parallel aluminum plates on which foreign particles are collected; a power pack with transformer and rectifier tubes for supplying high voltage current to the cell; and a water wash system for automatically washing dirt from the collecting plates.

It operates with complete safety, since no access may be had to any part of the equipment without the removal of safety screws which automatically shut off all high tension power. And except for very large sizes, most of the units are shipped fully assembled so that labor and materials are held to a minimum.

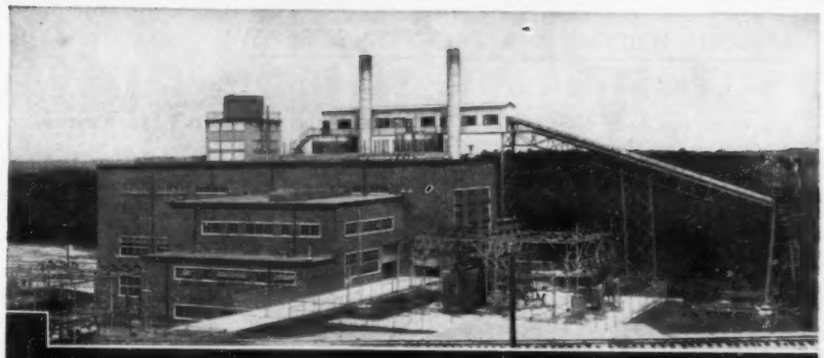
Features cited include: all-aluminum, one-piece ionizing collecting cell; built-in water wash system with greatly improved design; built-in glass wool filter on clean air side to help diffuse air and trap any blow off which may occur under unusual circumstances; complete framework of rust resistant, structural steel; side and top panels for cabinet.

Trion, Inc., 1000 Island Ave., McKees Rocks, Pa.

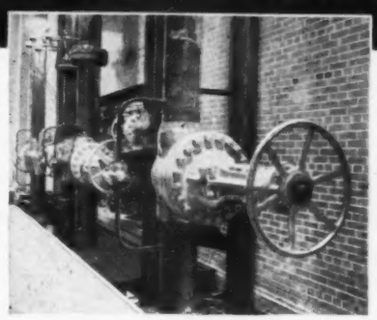
For additional data, request item J-215, using business reply card on page 262.

New Oleic Acid Has High Oxidation Resistance

Emersol 233LL is reported to be the purest oleic acid available commercially. Its content of polyunsaturated fatty acids is less than 4%. It contains in excess of 90% mono-unsaturated fatty acids. Because of this unique composition its oxidation resistance is extremely high and its chemical behavior somewhat differ-



More power to Springs Bleachery through LUNKENHEIMER VALVES



ARCHITECTS AND ENGINEERS:
Robert & Co., Inc.
Atlanta, Ga.

CONTRACTORS:
Grinnell Co., Inc., Charlotte, N. C.

Springs Cotton Mills' Bleachery Division at Grace, S. C., is an outstanding development of one of the nation's largest textile manufacturers.

The power plant is based upon two 150,000 lb. per hour boilers. Large numbers of Lunkenheimer Valves including main steam, boiler feed, check and non-return valves, as well as small and large valves ranging from 125 to 1500 lb. standard for miscellaneous services, are used to control the power and process steam, powerhouse water supply, processing and fire protection.

This modern installation is another interesting example of the high regard in which Lunkenheimer Valves are held throughout all industry. If you are planning new construction or modernization of present facilities, it will pay you to specify Lunkenheimer Valves. Their reputation for lower-cost, trouble-free service is industry-wide.

CALL YOUR DISTRIBUTOR

He has the experience and the stock to serve your needs.

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EXPORT DEPT. 318-322 HUDSON ST. NEW YORK 13, N. Y.

ent from ordinary oleic acids.

Because of the high resistance to oxidation of Emersol 233LL, this product should be of considerable interest to those textile mills currently using oleic acid or those who prefer an all-fatty lubricant.

Emery Industries, Inc., 4300 Carew Tower, Cincinnati 2, Ohio.

For additional data, request item J-155, using business reply card on page 262.

Single Stroke Lift Truck

A single stroke mechanical lift truck for moving loads varying from a ton to 2500 pounds is especially adaptable for use in close quarters.

Swiveling a full 360 degrees, the handle is designed to apply maximum lifting torque regardless of angle; it is unnecessary for the operator to swing the handle to the "out front" position.

Design of the truck serves to keep the platform level, despite floor obstructions. Truck also features hydraulic, shock-proof lowering, plus quick lift.

West Bend Equipment Corp., West Bend, Wisconsin.

For additional data, request item J-227, using business reply card on page 262.

Rubber Vibration Dampener Has Semi-Pneumatic Action

Shock Stops are a new type of rubber vibration dampener with a semi-pneumatic action. Vibrations set up by most types of motorized equipment can be easily isolated by placing Shock Stops between the base or feet of the equipment and the floor or foundation. Floors, walls and ceiling are guarded from damage, noise is reduced and production increased, it is claimed.

The waffle-like grid of the Shock Stop design, when laid on a smooth surface, tends to trap air. Vibrations of unwanted amplitudes are diverted by this air through the supporting ribs and do not pass to the supporting surface.

Shock Stops are available in large 18" x 18" square sheets that may be cut to the required size; also in round shapes 3¼" and 2¼" in diameter.

The Connecticut Hard Rubber Co., New Haven, Conn.

For additional data, request item J-641, using business reply card on page 262.

New Hoist Designed for Dyehouse Application

The Hevi-Lift hoist is said to be well suited for dyehouse service because of its low headroom design and

Hevi-Lift hoist (Harnischfeger).

10% LOWER PRICES

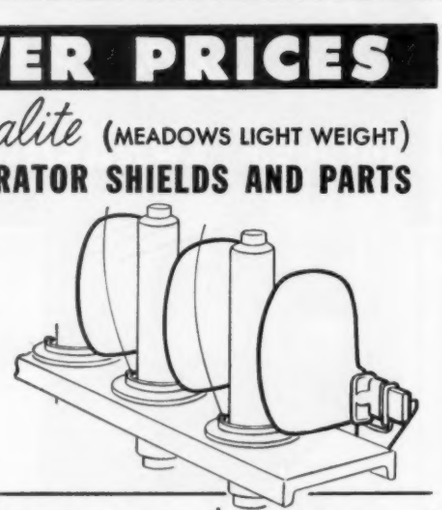
ON WHITEHEAD *Permalite* (MEADOWS LIGHT WEIGHT) ALUMINUM ALLOY SEPARATOR SHIELDS AND PARTS

Enlarged production facilities and careful buying of materials make these low prices possible. Whitehead Permalite Separator Shields are made from light, but strong-as-steel, aluminum alloy. They are designed to mount directly on the ring rail and can be turned back when doffing. They will prove satisfactory on your most troublesome frame.

Whitehead Permalite Separator Shields offer you all of these money-saving, time-saving advantages:

- No attention after installation
- Reduction of live weight—from as much as 300 lbs. in old slotted steel shield assemblies to as little as 35 lbs. per frame.
- Less vibration, wear of cams, worm gears and lifter-rod bearings
- Use of lighter travelers which reduce power costs, wear of rings and travelers
- Fewer ends down: some mills report 27% less
- Solid polished blades (not slotted) which cause less wear on yarn, collect less lint and fly, resulting in smoother yarn

Made in 20 sizes for new assemblies and old-style angle replacements.



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EASILY INSTALLED! Simply drill and tap ring rail. We supply aluminum alloy shields and bar drilled to your gauge and ring count, together with proper support hangers, necessary screws and washers.

EACH JOB ENGINEERED! When ordering specify rail width, thickness of back flange, gauge, count of rings in each rail on one side only as 24-22-22-22-24.

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Tennessee
Ed F. Brown, 417 Dale Ave., Knoxville, Tenn.
Northern Representative
Matthews Equipment Co., 93A Broadway, Providence, R. I.

ability to withstand unusually high temperatures and humid conditions.

An important feature claimed for the hoist is its full magnetic push-button control which permits instant lifting, traveling and lowering operations.

Harnischfeger Corporation, 4400 W. National Avenue, Milwaukee 14, Wisconsin.

For additional data, request item J-246, using business reply card on page 262.

Tensionless Jig Has Many Interesting Features

The Mezzera Jigger, an Italian-made machine for bleaching and dyeing cloth in open width, is now available to mills in this country. Versatility is the outstanding feature claimed for the machine since it may be used in all processes of scouring, bleaching, dyeing, and washing of cotton, silk, rayon, nylon, blends, etc.

Other features listed include: tensionless operation; passage counter with automatic stop; adjustable brakes mounted on a free wheeling arrangement; cover is made of safety glass.

Ernest L. Frankl Associates, 22 East 40th St., New York 16, N. Y.

For additional data, request item J-296, using business reply card on page 262.

Diaphragm Valve

A new line of diaphragm valves utilizes a design principle that limits the diaphragm function to sealing the bonnet only. A separate seating member, giving positive control of flow independently of the diaphragm, reduces the flexing to which the diaphragm is subjected and eliminates the diaphragm crushing action.

As a result, a diaphragm lasts many times longer; shut-off of flow is positive at all times; even in the event of diaphragm failure, fluid cannot pass on to the line when the valve is closed.

The new valve is considerably easier to operate, according to the manufacturer. Quicker closing is also a feature. Y-pattern body design gives greater flow capacity.

Two types of valves are available, one plain iron and the other neoprene lined and coated.

Crane Co., 836 S. Michigan Ave., Chicago 5, Ill.

For additional data, request item J-642, using business reply card on page 262.

Atlas Launder-Ometers

used in testing of Detergents at Wyandotte Chemicals Corporation

ATLAS Launder-Ometers, used to determine properties of detergency, color fastness, and resistance to washing and mechanical action, accurately reproduce washing conditions at accelerated speeds.

A typical application of the Launder-Ometer is a series of exhaustive tests conducted by the U. S. Army Quartermaster Corps and the Wyandotte Chemicals Corp. to determine the degree of sterilization and fading caused by various laundering and sterilization treatments of two selected types of Army fabrics — a cotton knit, and a 50% wool, 50% cotton knit. In these tests, the fabric samples were washed in a number of solutions containing chlorine-liberating germicidal agents, while mechanical action was simulated by 15 stainless steel balls introduced into each jar.

Results of these tests enabled the Quartermaster Corps to develop sterilization procedures for Army Mobile Laundry Units, and to obtain a fabric capable of withstanding rugged washing. In this, as in many other ways, testing in Atlas Launder-Ometers resulted in substantial savings and better materials.

New research model Launder-Ometers for accelerated testing of larger samples have recently been developed by Atlas. These units, with capacities ranging from 20 pint jars to 6 half-gallon containers, are now part of the complete line of standard Launder-Ometers.

ATLAS ELECTRIC DEVICES CO.

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Refrigerating Machine Employs Steam

Development of a new refrigerating machine that employs steam for air conditioning purposes has been announced. The new unit is an absorption machine which uses plain water as a refrigerant and a simple salt as an absorbent.

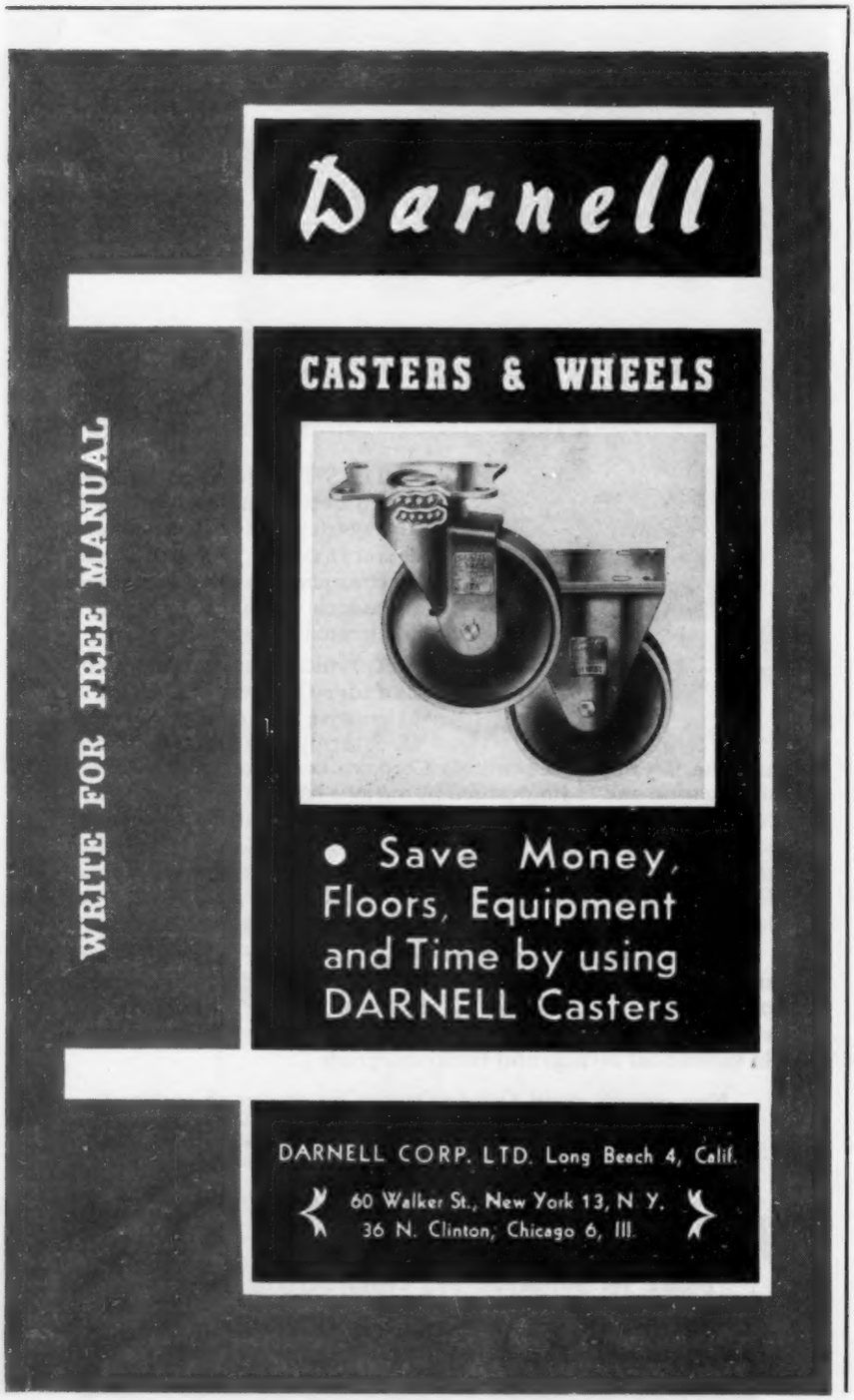
According to the manufacturer, it represents a significant advance in modern air conditioning, particularly in areas where steam can be produced at relatively moderate costs, where natural gas is available, or where a factory has a steam plant that is lying relatively idle in summer.

The unit will operate on either high or low pressure steam, or even low pressure waste steam. Aside from a small solution pump it has no moving parts, and therefore is practically noiseless and vibrationless.

The machines are being produced in 115, 150 or 200-ton capacities.

Carrier Corporation, Syracuse, N. Y.

For additional data, request item J-643, using business reply card on page 262.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36 N. Clinton, Chicago 6, Ill.

New Take-up Bearing for Conveyor Application

A new ball bearing take-up unit is known as a Wide Slot SC Ball Bearing Take-Up Unit. This unit consists of a deep groove precision bearing with large balls and retainer enclosed in a rugged, well designed outer housing with wide milled slots on each end for supporting guides. The housing has a hole for receiving the unthreaded end of an adjusting screw.

This take-up bearing is suitable for conveyor and power transmission service where provision must be made for changes in shaft position.

Dodge Manufacturing Corp., Mishawaka, Indiana.

For additional data, request item J-644, using business reply card on page 262.

All-Purpose Hose

The development of a new all-purpose hose, designated "Ortac," has been announced. The new hose product is capable of carrying air, water, oil, gasoline and acids of low concentration and temperature, it is claimed.

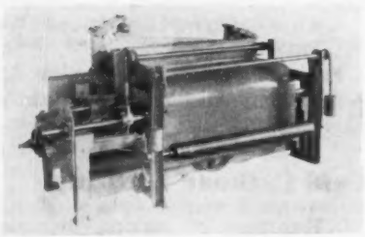
Made with vertically braided rayon carcass and oil-resisting synthetic tube, friction and cover, the hose is being manufactured in sizes from $\frac{3}{16}$-inch to 1½-inch inside diameter.

Goodyear Tire & Rubber Co., Mechanical Goods Division, Akron, Ohio.

For additional data, request item J-645, using business reply card on page 262.

Automatic Batt Cutter Has Many Applications

The Alfa Automatic Batt Cutter is adaptable to many applications and will automatically measure to length and cut a wide variety of materials. Cotton, sisal and other batts, padding, insulating blankets with or without cloth or paper backing, in light and



Automatic batt cutter (Spadone).

heavy thicknesses, can all be cut with equal ease.

Cutters are generally placed at the end of processing lines, the material being continuously fed from a garnett, gang stitcher or other machine. They also have unlimited use as an individual unit and can be furnished with a separate roll stand drive and in special cases made portable by mounting on casters. A simple built-in synchronizer permits automatic operation both on a processing line or when feeding from an individual roll. A quick change set of standard gears controls the length of the piece to be cut. In some instances when conditions permit it is desirable to eliminate the change gears and substitute an electric eye or limit switch; this can easily be accomplished. While used mainly for cutting batts, the machines will also successfully handle a continuous feed of various types of fabrics, etc.

Spadone Machine Co., Inc., 10 East 43rd St., New York 17, N. Y.

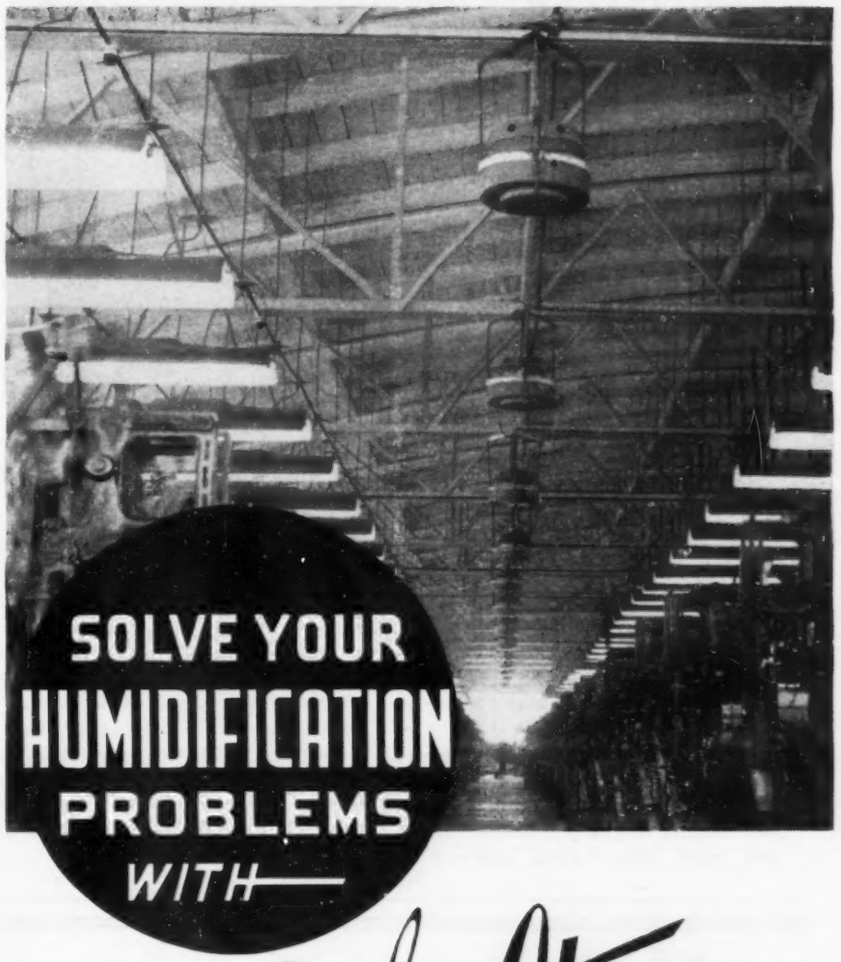
For additional data, request item J-213, using business reply card on page 262.

New 125 Lb. S. P. Valves Have Strength and Long Life

An improved line of 125 lb. S.P. bronze globe, angle and check valves has been announced. According to the manufacturer, the new valves are designed to provide greater strength and longer service life.

Fig. 2140 globe valve and Fig. 2141 angle valve have a malleable iron, non-heating handwheel; identifying nameplate; hexagon head gland which eliminates "prying" when repacking; machined repacking seats; solid bronze discs which are renewable on ¾" and larger sizes.

Check valves, Fig. 2142 lift check and Fig. 2144 swing check, have similar features of strength and design. In Fig. 2142, guide lugs on the disc



- . . . can be installed anywhere, in high or low ceiling rooms and at any location where needed . . . no floor space required.
- . . . low installation cost . . . no compressors, duct work, expensive air or drain piping required.
- . . . where lint is present, working parts are filter-protected.
- . . . simplicity assures low maintenance cost by plant's own crew.
- . . . distribution of water vapor directionally controlled.
- . . . uniform humidification assured by series of zone automatic control stations.
- . . . an ideal means for providing either "spot", "booster", or complete humidification.
- . . . factory-assembled, ready to attach to local water supply.

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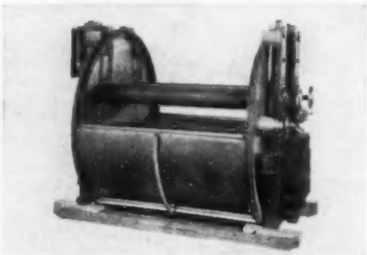
and guide sleeve in cap assure positive seating. Fig. 2144 has two renewable side plugs which serve as bearings for the disc carrier pin.

The Lunkenheimer Co., Cincinnati 14, Ohio.

For additional data, request item J-646, using business reply card on page 262.

New Type Dye Jig Enclosure



Dye jig enclosure (Glasco).

The novel feature of a new stainless steel dye jig enclosure is the way it turns down under the jig when not in use. The two curved panels of this enclosure, opening at the top, slide down in circular tracks at each end of the jig, leaving the jig entirely open from side to side and end to end. The panels are under the jig, entirely out of the way when in open position.

The sections of the enclosure are counterbalanced and move easily on roller bearings, making opening and closing extremely simple, quick, and easy. The curved surfaces of the enclosure sections prevent drip of steam condensate on the goods in the jig. There is no blast of steam to endanger the operator when the enclosure is opened. The hot steam goes safely upward, according to the manufacturer.

This cylindrical enclosure fits most jigs now in use and can be refitted should new jigs replace those to which they were originally fitted.

Full size cloth rolls are taken, and there are no obstructions above the level of the jig to complicate handling of rolls in charging or discharging the jig.

Large windows give a good view of the jig when enclosure panels are closed.

Glasco Equipment Corp., 2 Wait St., Paterson 4, N. J.

For additional data, request item J-160, using business reply card on page 262.

Cold Cathode Lighting

Advantages of instant, flickerless and non-fluctuating light at the flip of a switch, are claimed for cold cathode, a type of fluorescent lamp said to have more light with less glare, less heat, and longer life.

Cold cathode is so named because it starts cold and operates at a comparatively low temperature, usually about 12 degrees above room temperature. This highly refined, mercury vapor argon gas lamp is coated on the inside with fluorescent powders and has a specially designed rugged electrode at each end. Lamp life is unaffected by the number of starts or by humidity or vibration, according to the manufacturer. Striking force to initiate and operate the light arc is a constant voltage transformer.

Protective features eliminate the

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possibility of receiving an accidental electrical shock.

Colonial Electric Products Co., East Paterson, N. J.

For additional data, request item J-647, using business reply card on page 262.

Mechanical Hour Recorder

A new instrument, the Reliance Hourmaster, records the number of hours any piece of machinery, or equipment with moving parts, has been operated. It converts revolutions per minute, from 1 to 4,000, into hours of operation.

Entirely self contained, the Hourmaster is a carefully designed, ruggedly built, mechanically operated instrument. Space is provided for record cards which can be used to accumulate service, production or maintenance records. Each instrument adds up to 100,000 hours of operation and requires practically no service or maintenance, according to the manufacturer

Barbour Stockwell Co., Cambridge 39, Mass.

For additional data, request item J-648, using business reply card on page 262.

Portable Safety Transformer

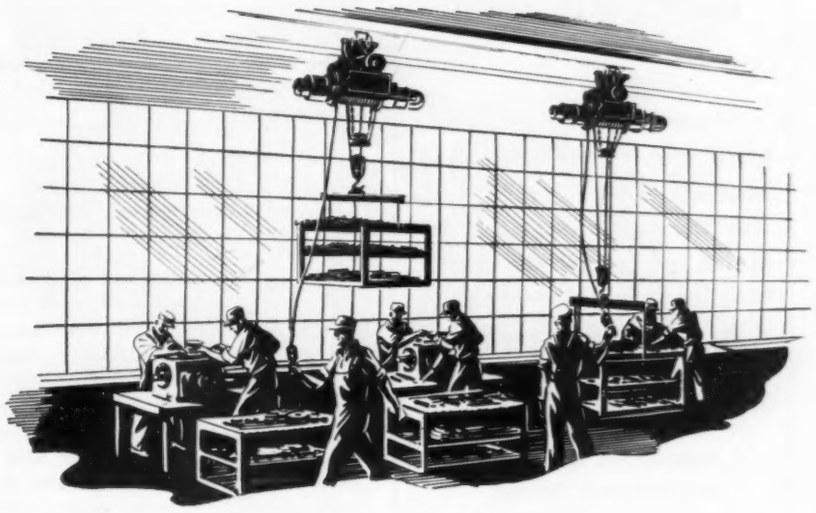
A portable safety transformer designed to safeguard industrial workers in damp or wet locations from the possibility of fatal electric shock while working with the conventional type of 110-volt extension trouble-lamp, has been developed.

Called "Saf-T-Lite," the new device is described as a portable step-down transformer that weighs only 4¼ pounds and reduces a 110-volt circuit to only 6 volts, a voltage which is said to be harmless.

Small in size, Saf-T-Lite looks like a large black capsule, the safety transformer being protected by a strong and water-proof bakelite casing tested to withstand extreme physical and chemical abuse. When connected to an outlet, the unit can be left on floor or table or it can be hung from any wall fixture by a convenient hook which protrudes from the top of the transformer.

Both 6-volt and 32-volt models are being made available either complete with trouble-lamp and 25 feet of heavy insulated extension cord, or just as safety transformers with in-

BREAK ASSEMBLY LINE BOTTLENECKS BEFORE THEY FORM



Be sure there is enough lift power and speed to feed parts or sub-assemblies to the main line at the correct tempo.

Will your need be for overhead cranes? What capacity? Or hoists? How large? How operated? From cabs—or from the floor with pendant controls?

The man best qualified to help you answer these queries is the Shepard Niles specialist. He has reference data to cover the performance of all three—and his mind is unprejudiced because he has sold all three for years. Let him help you plan!

SHEPARD NILES
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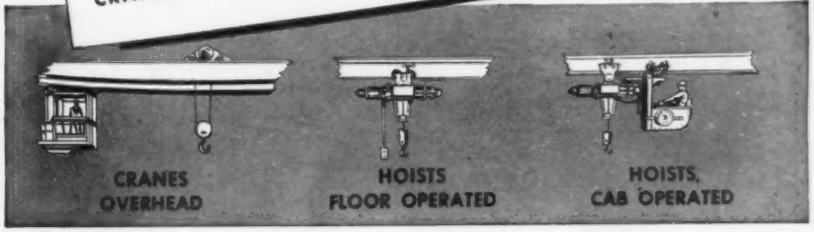
Makes and sells all three lifting tools for airborne shop loads.



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1. Maple harness sheaves with impregnated maple bushings.
2. Parallel blocks
3. Whip roll bearings
4. Crank arms
5. Tape tension pulley bearings

Our second type of bearing is made from powdered metal, as follows:

1. Porous Metal self-lubricating bearings, in many different alloys and densities
2. Non-corrosion nickel-copper bearings for bleacheries and dye houses
3. Iron and steel machine parts
4. Gears

We are regular suppliers to most of the leading textile machine manufacturers.

•

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Ralph Gossett, Greenville, S. C. — Belton C. Plowden, Griffin, Ga.

sulated leads for quick and easy connection, according to the manufacturer.

Etraco Manufacturing Company, Inc., Woods Church Road, Flemington, New Jersey.

For additional data, request item J-649, using business reply card on page 262.

Hand Truck Attachment for Palletless Handling of Cloth Bales

The "Bunnyhugger" attachment for a line of battery powered hand trucks makes it possible to handle certain types of commodities—bales of fabric, large crates, or pigs,—without the use of skids or pallets.

To pick up loads, the Bunnyhugger is maneuvered so that the load is between the forks; the operator then manipulates a control-lever which causes the forks to grasp the load in a pincher-like movement. The forks are then lifted and the load transported or tiered as desired.

Yale & Towne Mfg. Co., Phila. Div., Philadelphia, Pa.

For additional data, request item J-231, using business reply card on page 262.

CliPin Converts Clip Tinters to Handle All Types of Fabric

Clip frames can be converted to handle all constructions, woven or knit, synthetic or natural, with a CliPin attachment, it is said. Any type of clip now on the market can be modified to fit the CliPin.

Consisting of a bar studded with pins, the device is added to tenter frame clips by means of a bracket or solid casting depending on the clip design. Resetting of feed-in and take-off bars is the only mechanical change required when transferring the chain from clips to pins. The CliPin will not interfere with normal use of present clip frames.

CliPins may be installed at the factory or on the job. Clip manufacturers will be licensed to use this device.

Cadgene Machinery Company, Fifth Avenue and McLean Boulevard, Paterson 4, N. J.

For additional data, request item J-650, using business reply card on page 262.

Staple Fiber Combines Viscose and Acetate Properties

A chemical staple fiber in the rayon group, called Celcos, has characteristics and properties which promise to open up new avenues of use for all textile fibers, according to the manufacturer.

Combining the best features of both acetate and viscose staple fibers and having in addition an ability to cross-dye, an ease of processing and an absorptiveness for resin and other finishes, Celcos is reported to be an ideal all-purpose rayon staple fiber, either used by itself or blended with other fibers. Fabrics made thus far are said to be ideal for women's suitings and dress goods as well as for many types of men's wear suitings. It is expected that new applications will follow.

By itself, or blended with other fibers, Celcos can be processed into yarns on standard types of carding and spinning equipment.

Celanese Corp. of America, 180 Madison Ave., New York 16, N. Y.

For additional data, request item J-404, using business reply card on page 262.

New Gums Dissolve Rapidly

Gum Tragacanth, Locust Bean (Carob), and Karaya can now be rapidly dissolved as a result of a process recently developed.

The new gums, known as "Aqualized" Gums, do not require the usual boiling, alkali treatments or mixing with sugar, glycerine, glycols or alcohol, according to the manufacturer.

The Gums are said to save many hours of dissolving time because they go into solution in a matter of minutes without the formation of lumps. They require no filtering and there is no loss of undissolved gum.

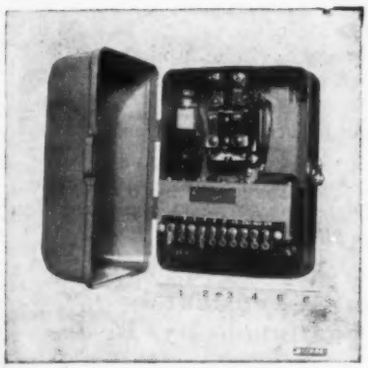
Glyco Products Co., Inc., 26 Court St., Brooklyn, N. Y.

For additional data, request item J-405, using business reply card on page 262.

Low-Energy Relays for Drop Wire Detection

New universal type electronic detecting relays, designed to operate from initiating circuits or contacts carrying small current at low voltage, are available.

These relays are designed for drop wire detection. They can be used for warp stop control for looms using



Low-energy relay (Westinghouse).

standard drop wires, bobbin changing mechanisms for looms, feeler motions for all types of knitting machines, stop motions for spoolers and warpers, liquid level controls, and similar applications with a low-current initiation circuit.

Low-energy relays are available as a single unit mounted in its own cabinet, or as multiple unit relays involving a combination of ten circuits on a panel within a common enclosure.

Westinghouse Electric Corp., P. O. Box 868, Pittsburgh 30, Pa.

For additional data, request item J-223, using business reply card on page 262.

Continuous Drain Trap

A steady, continuous, uniform flow trap has been developed which affords a means for instant removal of large quantities of water, oil, dirt and other condensates from steam, gas and compressed air lines. The trap is designed to eliminate alternate "fill and spill," steam and heat losses, steam, air and gas pressure drops, air binding, freeze-ups, hammer, chatter and other difficulties encountered in the use of intermittent discharge traps.

The steam, gas or air condensate mixture enters the trap above the condensate. A slide valve and float mechanism regulates flow of condensate according to the volume of condensate accumulation in the trap. The outlet valve seals tightly when there is no condensation taking place, thereby preventing unnecessary steam and heat losses.

The steam trap is manufactured in screwed or flanged types for ½", ¾" and 1" pipe sizes, and for pres-

UNDOUBTEDLY your local mill supply distributor stocks the Johnson Bearings you require. A great many do. They are part of a nationwide organization planned to make available to users most of the bearings they need. These stocks include General Purpose Bearings in over 850 sizes, Electric Motor Bearings, Graphited Bearings, Babbitt Metal, and Johnson Universal Bronze Bars.

As a "pipe-line" to these distributors, twenty factory branches are established in principal industrial areas, with large and complete stocks in each territory. Therefore you are assured of prompt service when you order Johnson Sleeve Bearings locally.

sures of 150 psi and 300 psi and temperatures up to 750 F.

W. S. Rockwell Co., 200 Eliot St., Fairfield, Conn.

For additional data, request item J-651, using business reply card on page 262.

Low Temperature Method for Wool Shrinkage Control

Development of a new process making it possible to apply "Lanaset" resin to wool at a low temperature was announced recently. In the new process, ordinary drying equipment is adequate.

The amount of resin required is reduced by 30 to 50 per cent. Another advantage of the process is that it does not dull delicate shades, and the wash fastness of all colors is improved.

American Cyanamid Co., Textile Resin Dept., Bound Brook, N. J.

For additional data, request item J-234, using business reply card on page 262.

Model E5 strapping tool mount (Acme).

Handy Mount for Strapping Tools

The Acme E5 Universal tool mount has rubber casters for easy portability and four leveling screws on the base for eliminating wobble on uneven floors. The mount has a total of 38" vertical movement. The center post is spring-mounted for easy adjustment.

The strapping tool can be used in a 360-degree circle around the post, which facilitates easy cross-strapping.

Acme Steel Company, Strapping Division, 2840 Archer Ave., Chicago, Ill.

For additional data, request item J-290, using business reply card on page 262.

Ten-Co Tensionless Continuous Dye Beck

A new continuous dye beck, evaluated in actual mill trials, is claimed to have tensionless features. Present equipment may be modified with new drive and several attachments to reproduce essential motions of this dye beck.

The dye beck loads and unloads at high speeds without manual labor. A patented Tangle Control stops the machine in case of operator negligence. Dye beck can be loaded and unloaded simultaneously, 30 minutes being required for the 12-foot beck.

A variable speed hydraulic drive which permits adjustments of speed according to quality of cloth in dyeing is capable of speeds up to 60 rpm.

Ten-Co Machine Co., 58-72 Mill Street, Paterson 1, N. J.

For additional data, request item J-652, using business reply card on page 262.

Floor Maintenance Machines Feature Low Center of Gravity

A low center of gravity and special reversing switch designed to prolong brush life are features of the new floor scrubbing and polishing machines recently announced. Available in single or twin-brush models, the machines are of the revolving brush type, designed for wet and dry scrubbing, waxing, rug shampooing, floor polishing, grinding, sanding and troweling.

Single-brush models feature a special reversing switch which permits choice of clockwise or counter-clockwise rotation. This feature prevents bending, matting and burning of bristles, keeps wire brushes sharpened, and increases cleaning efficiency, according to the manufacturer.

Three models are now in produc-

HOW ANDERSON SHIELDS INCREASE SPINNING ROOM EFFICIENCY

Spinning rooms using Anderson Shields save time and money, and prevent disruption when unnecessary breaking, chipping, and splitting of bobbins and spools is avoided. In a year's time these items alone can amount to a surprising sum . . . Insist on Anderson and get the best protection metal shields afford . . . Watch your spinning room efficiency increase!

TEXTILE SHIELD CO., INC.

Metal Protection for Wood Turnings

J. N. ANDERSON, *Treas.*
LAWRENCE, MASS., U.S.A.

tion: Model "C" with 16" brush spread; Model "D" with 19" brush spread; and Model "E" with twin brushes having an over-all spread of 21".

Corbin Screw Division, The American Hardware Corp., New Britain, Conn.

For additional data, request item J-653, using business reply card on page 262.

Shuttles for Weaving Rayon Fabrics

The S7X center tension eye shuttle for reverse wind (S7 for regular wind) on S5 and S6 looms is a new development. The eye has solved reverse wind rayon crepe filling troubles, it is claimed, thereby increasing weave room production.

The S7 and S7X eyes hold the thread in perfect alignment and constantly down in place according to the manufacturer. The extra narrow slot in the eye, the shuttle's full shoulder at the front of the bobbin chamber, and the generous-sized, precision-made hook combine to keep the filling always straight before it reaches the steel encased tension pads.

These tension pads have recently been extended up into the eye so that the filling cannot get in behind the pads.

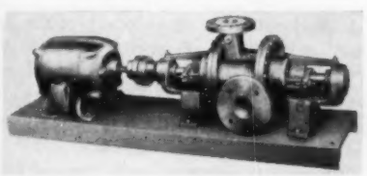
Watson-Williams Mfg. Co., Millbury, Mass.

For additional data, request item J-275, using business reply card on page 262.

Water Jacketed Turbine-Type Pumps

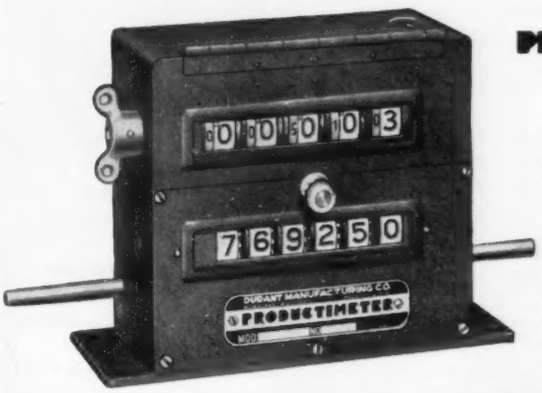
A line of single- and two-stage water jacketed turbine-type pumps, designed with extra deep stuffing boxes for the handling of high temperature and highly volatile liquids, features: notable performance on high head, small capacity duties; will not vapor bind; hydraulic balance; no metal-to-metal contact within the pump; and practically constant capacity over

Water-jacketed, turbine-type pump (Aurora).



PRODUCTIMETERS
for Accurate Measure on Every Machine

Productimeter Textile Counters register production swiftly and accurately . . . they provide a dependable basis for wage payment . . . they insure maximum production and efficiency. These easy-to-read counters are available in a wide range of models to meet every mill need.

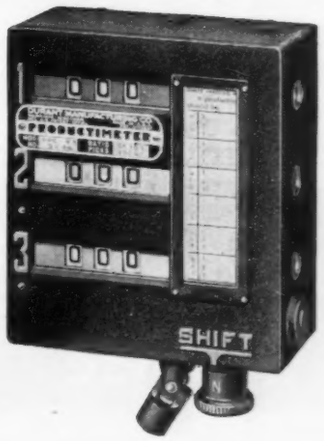


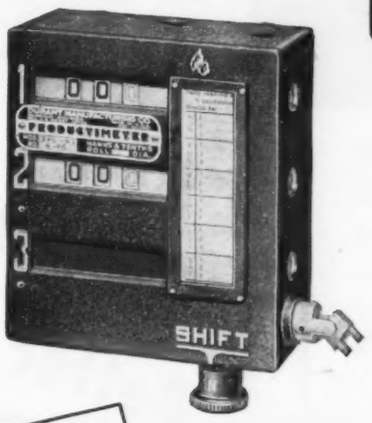
PRODUCTIMETER
PREDETERMINED COUNTERS

Set the predetermined mechanism for the desired yardage, then start production. The counter stops the machine or sounds signal when quantity is reached. Prevents over-runs or under-runs . . . available in several models to register individual runs and accumulated totals.

PRODUCTIMETER
3-SHIFT PICK COUNTERS

Ruggedly built for long, continuous wear. Made of precision machined metal parts, including wearing parts of number wheel. Also available in 1-Shift and 2-Shift models.





PRODUCTIMETER
2-SHIFT HANK COUNTERS

An exceptionally sturdy and accurate counter for installation on spinning and roving frames, speeders, combers, twisters. Also available in 1-Shift and 3-Shift models.

Send for Catalog No. 50

DURANT MANUFACTURING COMPANY
1973 North Buffum Street, Milwaukee 1, Wisconsin
173 Orange Street, Providence 3, R. I.
Representatives in Principal Cities

PRODUCTIMETERS
SINCE 1879 — *Speedometers* OF INDUSTRY

wide head variation.

The water jacketing and deep stuffing boxes reduce the temperature of any liquid leakage, thus preventing flashing or vaporizing of the leakage upon reaching the atmosphere. This cooling effect preserves the packing and avoids shaft scoring.

The pumps are so designed as to compensate for expansion and contraction due to handling high temperature liquids.

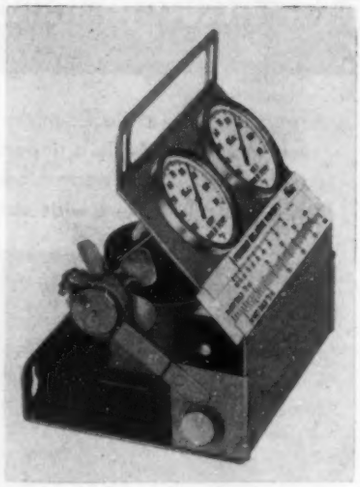
Aurora Pump Co., 190 Loucks Street, Aurora, Illinois.

For additional data, request item J-108, using business reply card on page 262.

Humidity Reading Quickly Obtained

Accurate humidity readings can now be obtained quickly as a result of a new motor-operated fan developed for attaching to any Weston relative humidity indicator.

The small fan, powered by dry cells, will move air over the indicator's wick in sufficient volume to permit obtaining stable readings within 30 seconds.



Humidity indicator (Weston).

Weston Electrical Instrument Corp., 617 Frelinghuysen Avenue, Newark 5, N. J.

For additional data, request item J-298, using business reply card on page 262.

Moretex 3S* Size

Moretex 3S is a synthetic product which combines chemically with starches, gums, and gelatins to form a stable mix, which insures:

Uniform Sizing
Better Adhesion
Stronger Yarn
Smoother Yarn
Reduced Shedding

New Different Better

Easily Removed
Moretex 3S Sizings are easily removed by medium temperature washings.

Write for full information

Moreland Chemical Company Incorporated
Spartanburg, S.C.

*Trade Mark applied for

Sprinkler Type Extinguisher

A new automatic sprinkler "portable system" fire extinguisher is constructed of heavy brass, silver welded, and requires no piping or other expensive installation. Simply hang it up, and it is ready to operate, utilizing fire extinguisher fluid known as Chlorobromomethane.

When fire occurs, heat waves cause an approved sprinkler head to discharge under pressure a wide, fast-moving spray of combined carbon dioxide and atomized Chlorobromomethane. This quickly blankets and snuffs the fire, with no residue, stain, or damage, the manufacturer claims.

It is non-freezing, and has minimum specification capacity of 700 cubic feet.

Stop-Fire Inc., 125 Ashland Place, Brooklyn 1, N. Y.

For additional data, request item J-654, using business reply card on page 262.

Quick-Action Soldering Tool

A new, quick-action soldering tool, called the Pres-To-Heat, is designed to provide an effective and efficient means for high-speed precision soldering.

The device makes it possible to complete the average soldering job in less than 2 seconds, starting with an absolutely cold tool, according to the manufacturer. The tool itself is plastic and weighs 4½ ounces. It resembles a long-nosed pliers and has an actuating lever on the handle. A slight pressure on this lever enables the operator to hold the work securely—additional hand pressure causes the current to flow through the work, thereby generating instantaneous heat at the point of contact. A slight touch of solder and the joint is completed.

A standard tip design is supplied on all tools, but spade tips or off-set tips are available upon request.

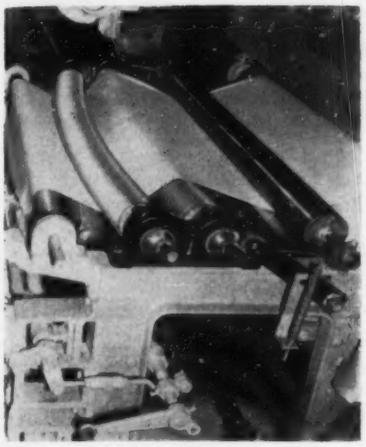
Appliance Division, The Housing Foundation, Inc., Deep River, Connecticut.

For additional data, request item J-655, using business reply card on page 262.

Slack Selvage Eliminator

A unit recently developed controls slack selvages and wrinkles before cloth enters the shearing machine. The device prevents cloth damage and considerably reduces cloth room slowdowns, it is claimed.

The unit consists of two expanders



Slack selvage eliminator (Mount Hope).

mounted in double brackets with a special pivoted spring balanced lead-on roll and is mounted on the entrance end of the shearing machine.

Slack is taken up in either selvage as the cloth is threaded under the tension roll. Passing over the first and under the second expander, the cloth is held taut and spread evenly across its width as it enters the shearing machine.

Mount Hope Machinery Co., 42 Adams St., Taunton, Mass.

For additional data, request item J-297, using business reply card on page 262.

Substantive Softener in Form of White Paste

A substantive softening agent in the form of a white paste is being marketed. Designated Syntho-Softener B, the product is said to assure a soft, full-bodied, velvety hand with maximum draping qualities to cotton, rayon, acetate, bemberg, wool and nylon fabrics.

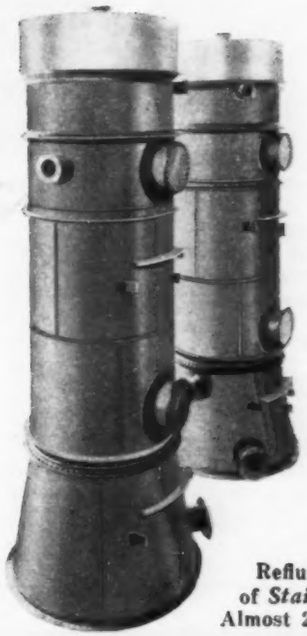
This agent, it is stated, preserves the maximum light fastness of goods dyed with such colors as directs, vats and the like; and mixes readily with resins, starches, gums, etc.

Syntho-Softener B shows no effect on the shade of dyed goods, no yellowing of whites, no rancidity or deterioration on ageing, and no discoloration on pressing, according to the manufacturer. It is readily soluble in hot water, forming solutions which are resistant to mild alkalies, acids or hard water.

Hart Products Corp., 1440 Broadway, New York, N. Y.

For additional data, request item J-656, using business reply card on page 262.

PROTECT YOUR PRODUCTION WITH *Stainless Steel*



Reflux Towers of *Stainless Steel* Almost 25 Feet High

Stainless Steel **is the answer when colors are not reproducing true in successive runs, when products suffer from metallic contamination, or if you are using extremely sensitive solutions or acids. For dyestuffs, chemicals, water and steam . . .** ***Stainless Steel*** **reduces maintenance and repair costs, expenses of frequent changes and adjustments, resists corrosion and will soon repay initial costs.**

Truitt will fabricate tanks of any size and capacity for acids, caustics, dyes and special solutions. Let ***Stainless Steel*** **solve your problem. Refer your requirements to us . . . our engineering services are available to you without cost.**

TRUITT
MANUFACTURING COMPANY
• GREENSBORO, NORTH CAROLINA •

Fabricators of Solid Stainless Steel and Stainless-Clad Tanks • Dyeing Vats • Washing Tanks • Steam Drums • Storage Tanks for Acids and Alkalis • Mechanical Agitators • Separators • Stainless Steel Trucks • And Many Other Stainless Steel Products.

Variable-Feed Wick Oiler

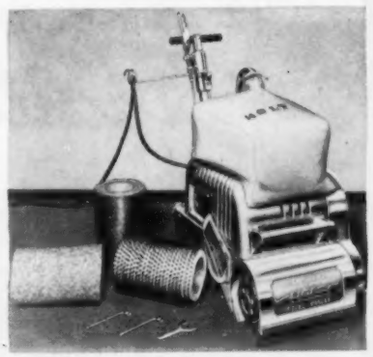
A new line of variable-feed wick oilers is available for use on equipment having solid bearings oiled from the top. Feed of oil is controlled by varying the size of wick embodied in tamper-proof base fitting. Greater feed variation may be obtained by using lighter or heavier oil.

Trico Fuse Mfg. Co., 2984 5th Street, Milwaukee 12, Wis.

For additional data, request item J-657, using business reply card on page 262.

All-Purpose Floor Machine Features Controlled Pressure on Drum

The Holt Model TMAP All-Purpose Combination Sanding and Steel-Wooling Machine is a powerful dual-motored machine, designed to do sanding, steel-wooling, cleaning, sweeping, and degreasing on textile mill floors. The machine features controlled pressure on the drum so that the consumption of steel wool is kept to a minimum, according to the manufacturer. This feature also keeps to a minimum the amount of floor seal which is inevitably removed from the floors during steel wooling.



Model TMAP all-purpose floor maintenance machine (Selig).

The Selig Company, 342 Marietta Street, N. W., Atlanta, Georgia.

For additional data, request item J-294, using business reply card on page 262.

Uniformity Meter Measures Weight of Fibers/Unit Length

A new uniformity meter tests sliver, roving and yarn for uniformity of structure by measuring the weight of the fibers per unit length.

The machine makes use of two condenser plates between which the yarn passes, the dielectric strength of the condenser varying with the mass of the yarn being tested.

A record of the uniformity of the material being tested is recorded on a graph paper tape.

Institute of Textile Technology, Charlottesville, Va.

For additional data, request item J-251, using business reply card on page 262.

Pressure-Sensitive Printed Identification Tape

A rugged, heavy duty pressure-sensitive printed identification tape is available. The adhesive and the printed surface of this tape has high resistence to moisture, extremes of temperature and abrasion, it is claimed.

Designated Topflex, the tape is quite handsome in appearance. Now produced in a choice of six colors, it has a lustrous finish and the imprinting is sealed in the body of the tape so that moisture or abrasion will not deface it. Uses include identification and coding of component parts, warning and instruction labels, trade mark and merchandising labels, etc.

Topflight Tape Company, Huber Bldg., York, Pa.

For additional data, request item J-214, using business reply card on page 262.

Loom Motor Features Integrally-Mounted Flywheel

A line of totally-enclosed flywheel loom motors is specifically designed to improve loom operation, reduce power costs, and increase loom speeds.

The outstanding feature claimed for these motors is the integrally-mounted flywheel. This flywheel, by reducing the peaks and valleys of speed and current, reduces both power losses and power consumption, providing altogether smoother loom operation and often making it possible to increase loom speed without increasing motor hp rating.

Furnished in ratings from ¾ to 2 hp, 1800 to 1200 rpm, these motors

Speed Up
Your Old Equipment
with New Load-Floating
Colson Casters
Rolling equipment that doesn't roll easily reduces efficiency and profits in your mill. There are 1458 standard Colson casters—many designed especially for Textile mills. They roll easily over all floors, swivel freely, are rust-resistant. Many models have thread guards. Colson also manufactures a wide range of trucks for the Textile Industry—hand trucks, platform trucks, box trucks, drum and barrel trucks and special devices. Write us or consult your phone book for the local Colson office.
THE COLSON CORP. ELYRIA, OHIO U.S.A. NO 3 SERIES-4 IN.
Model 3-427-16 with thread guards, designed especially for the Textile Industry.
Write Today For Free 68 Page Catalog
THE COLSON CORPORATION
ELYRIA, OHIO
CASTERS • • LIFT JACK SYSTEMS • • INDUSTRIAL TRUCKS

for REDS of radiant beauty

AMANIL NAPTHOLS ★ FAST COLOR SALTS OR BASES ★ STABILON

Ideal combinations for perfect coloring throughout the red range and into gold . . . everything you need for complete satisfaction in Napthol dyeing and printing. » » » Let us demonstrate the A.A.P. way to best results with the Napthol process; just call our nearest office, and an A.A.P. technician will gladly visit your plant.

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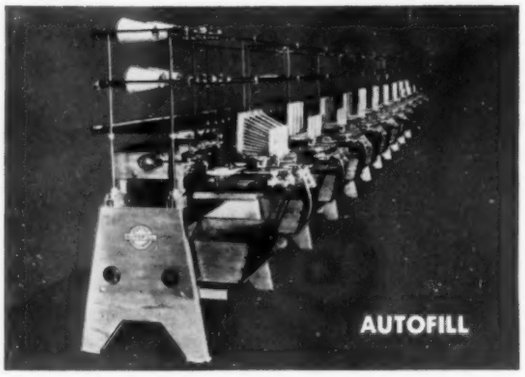
Announcing...

FOSTER-MUSCHAMP *HIGH SPEED*

FILLING WINDERS

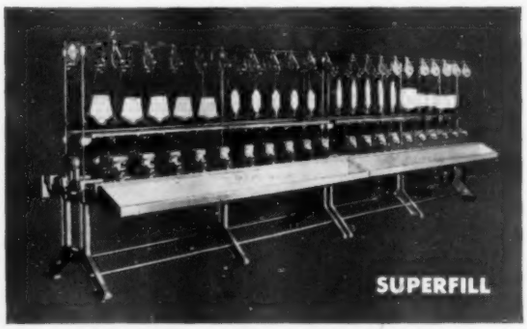
Made to American Standards

A FLEXIBLE, automatic winder for cotton, wool, synthetics and other fibers, it will wind any type filling bobbin, tube or quill from 3" to 9" at speeds in excess of 6,000 r.p.m. and in either direction. Supplied in gangs of 20-40 spindles, each 4-spindle unit has an individual automatic control, bunch builder, diameter control mechanism, traverse cam, layer-locking device and bobbin-length sizing mechanism. On rayons, up to 160 spindles can be tended by one operator.



A SEMI-AUTOMATIC, individual-spindle, high speed filling winder built in units of 20 spindles. Supplied with or without spindles and bunch builders. Equipped with new type three-speed V-belt drive which gives three ranges of speeds within 2,000-6,000 r.p.m. slow start. Individual spindle boxes used to facilitate single spindle repair. New 6-point cam makes possible lower cam speeds and provides positive layer-locking to reduce sloughing while weaving. Five standard traverses from 1 3/16" to 2". Wind ratio adjustable to 5½, 7, 11, or 22. Feeler wheel and traverse bar system control filling bobbin diameter. Filling length can be varied from 6"-9½". Creels available to wind over-end from cones, cheeses or bobbins, or by unwinding skeins.

A HIGH SPEED single-spindle filling winder for producing coreless filling yarn. Winds cotton, linen, spun rayon, blends, jute and wool in both fine and coarse counts at speeds over 500 ft. per min. Superfill packages are used in non-automatic looms and in automatic shuttle-changing looms and contain 2-3 times as much yarn as is normal on direct-spun filling bobbins. Winds on a bare spindle or a cop bottom base for regular bobbin-type shuttle. Built in units of 20, 40 and 60 spindles with each spindle a complete unit. Various types of supply equipment permit a variety of supply packages. Package diameter adjustable up to 1 9/16" and length up to 10".



A Filling Winder for Every Job

FOSTER MACHINE COMPANY, Westfield, Mass.

A Winder for Every Textile Job

SOUTHERN OFFICE • JOHNSON BLDG. • CHARLOTTE, N. C.

are of totally-enclosed construction.

General Electric Co., Schenectady 5, N. Y.

For additional data, request item J-410, using business reply card on page 262.

New Caster Design Prevents Thread Accumulation

Several new sizes and types of casters are especially designed for use in the textile industry. The most important feature claimed for these casters is that the spacer washer between the leg of the caster fork and the thread guard gives wide turns which effectively prevent the accumulation of threads.

The casters are available in 4", 5" and 6" sizes, both swivel and rigid construction, with either double ball race swivel casters or the more economical single ball race steel swivel casters with rigid types to match.

The Bassick Co., Bridgeport 2, Conn.

For additional data, request item J-122, using business reply card on page 262.

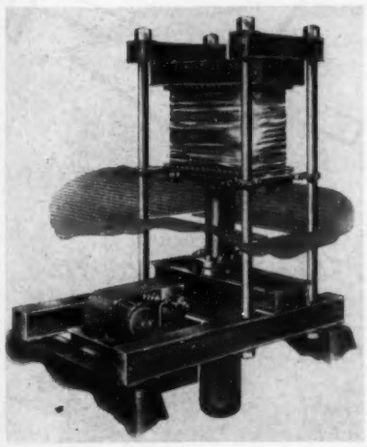
HIGH SPEED CLOTH PRESS

A new hydraulic cloth press combines speed with high pressure, permitting high speed production of high density bales.

Double handling of material is eliminated, resulting in substantial labor savings, increased production and reduced baling costs.

Economy Baler Co., Ann Arbor, Mich.

For additional data, request item J-658, using business reply card on page 262.



Here are the new

SERIES G BEAMS

with Improved Inside Supports and other construction improvements

— additional strength.
— stands stress of yarn better.
— truest running.
— withstands rougher handling.

NEW IMPROVED CAST-IRON INSIDE SUPPORT

Expressly designed to run on all new models of high speed warpers.

GK — COTTON
With Improved Cast-iron Inside Supports at ends, and three two-ply wood supports between

GR — RAYON
With Improved Cast-iron Inside Supports at ends, and seven two-ply wood supports between.

GN — NYLON, SYNTHETIC
With five Improved Cast-iron Inside Supports as shown.

We have doubled the number of fastenings securing the staves to the supports, with self-tapping screws used at Improved Inside Supports. The barrel remains smoother, and the beam will withstand rough handling with heavy loads and remain true running.

LITERATURE AND FURTHER DETAILS UPON REQUEST.

ALLEN COMPANY

ALLEN COMPANY
General Offices:
156 River Road
New Bedford, Mass.

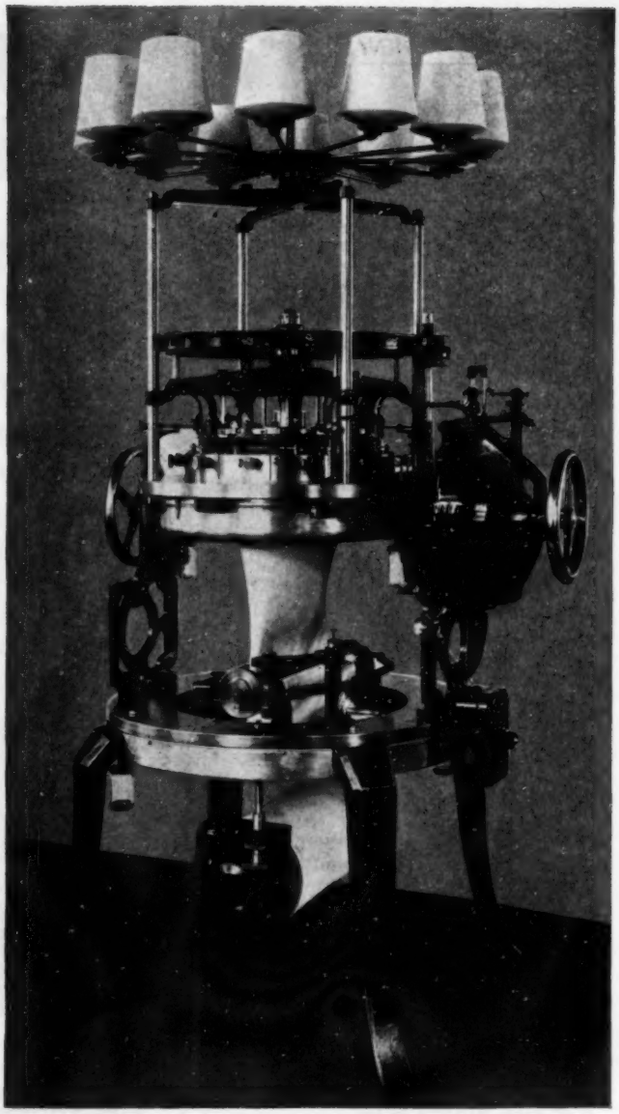
Representatives in all Textile Localities and all Principal countries of the World.

BEAMS FOR ALL TYPES OF WARPERS.
LOOM BEAMS
ADJUSTABLE BEAM HEADS
"Good Warps are made on Good Beams"

IT'S

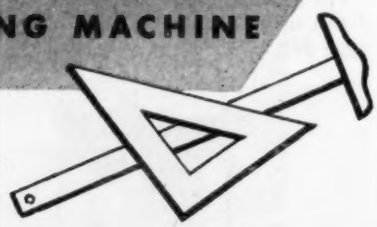
ENGINEERED

to do your very toughest knitting job PERFECTLY



Of course it can do your simplest operation too . . . it's so flexible our engineers can adapt it to every knitting product demand of your mill. Its beautiful workmanship is so perfect, it offers exceptional accuracy in garment sizes and practically unlimited style opportunities. Many operational features and advantages . . . such as the ability to change from an old cone to new cone without stopping the machine. Lots of others that we'd like to tell you about.

The NEW 1950
WILDMAN
KNITTING MACHINE



WILDMAN MFG. CO., Norristown, Pa.

Modern Equipment & Processing Review

(Knitting Equipment and Supplies)

Rotary Hosiery Dyeing Machine

A heavy gauge stainless steel rotary dyeing machine for hosiery features contoured ends which are said to impart strength, insure quieter operation, and give more even distribution of dye liquor. The use of a graduated dye distributor permits additions without the hazard of "flashing" or uneven dyeing, it is claimed.

There is no corrosion problem in sprockets or gears which come into contact with dye liquors since these parts are made of acid-resisting stainless steel.

Burlington Engineering Co., Inc., Graham, N. C.

For additional data, request item J-325, using business reply card on page 262.

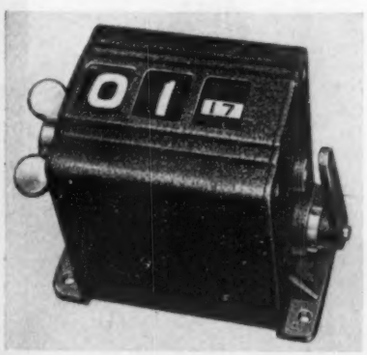
"Dozens" Counter

A new "Dozens" counter is designed for use in hosiery and glove mills. It gives inspectors a ready and accurate means of counting individual stockings and dozen pairs, and may be either hand-operated or adapted for machine actuation.

Veeder-Root, Inc., Hartford, Conn.

For additional data, request item J-320, using business reply card on page 262.

Hosiery counter (Veeder-Root).



Electric Stop Motion for Circular Machines

An electric stop motion, designated the WESCO "400," has been placed on the market. Each end of this stop motion is individually adjustable to accommodate different weights of yarns. An electric light on the top center bar signals when the device stops the machine.

The controller is a small compact unit and easily mounted on the machine.

Stop-Motion Devices Corp., 1471-77, Fulton St., Brooklyn 2, N. Y.

For additional data, request item J-329, using business reply card on page 262.

Model C Kidde Knitter Has Many Improvements

The Model C Kidde Knitter is a new Raschel type warp knitting machine. Major improvements over the earlier model Kidde knitter are: (1) a lower and more compact machine so that warp beams can be more easily reached by the operator; (2) a redesigned guide bar hanger with adjustment screws for very accurate setting of the individual guide bars; (3) a new heavy duty center trick plate support; (4) a redesigned cloth roll take-up mechanism; (5) magnetic starter switches; (6) internal lighting,

66 GAUGE, 4-SECTION FULL-FASHIONED MACHINE

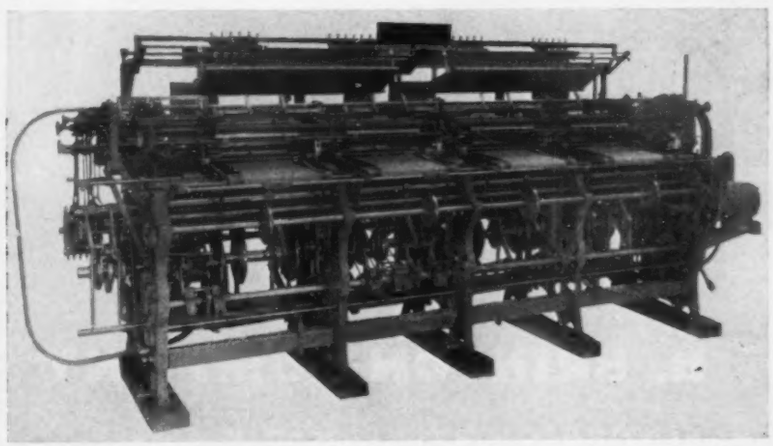
Completion of a 66 gauge four-section full-fashioned hosiery Twin-Knitter has been announced.

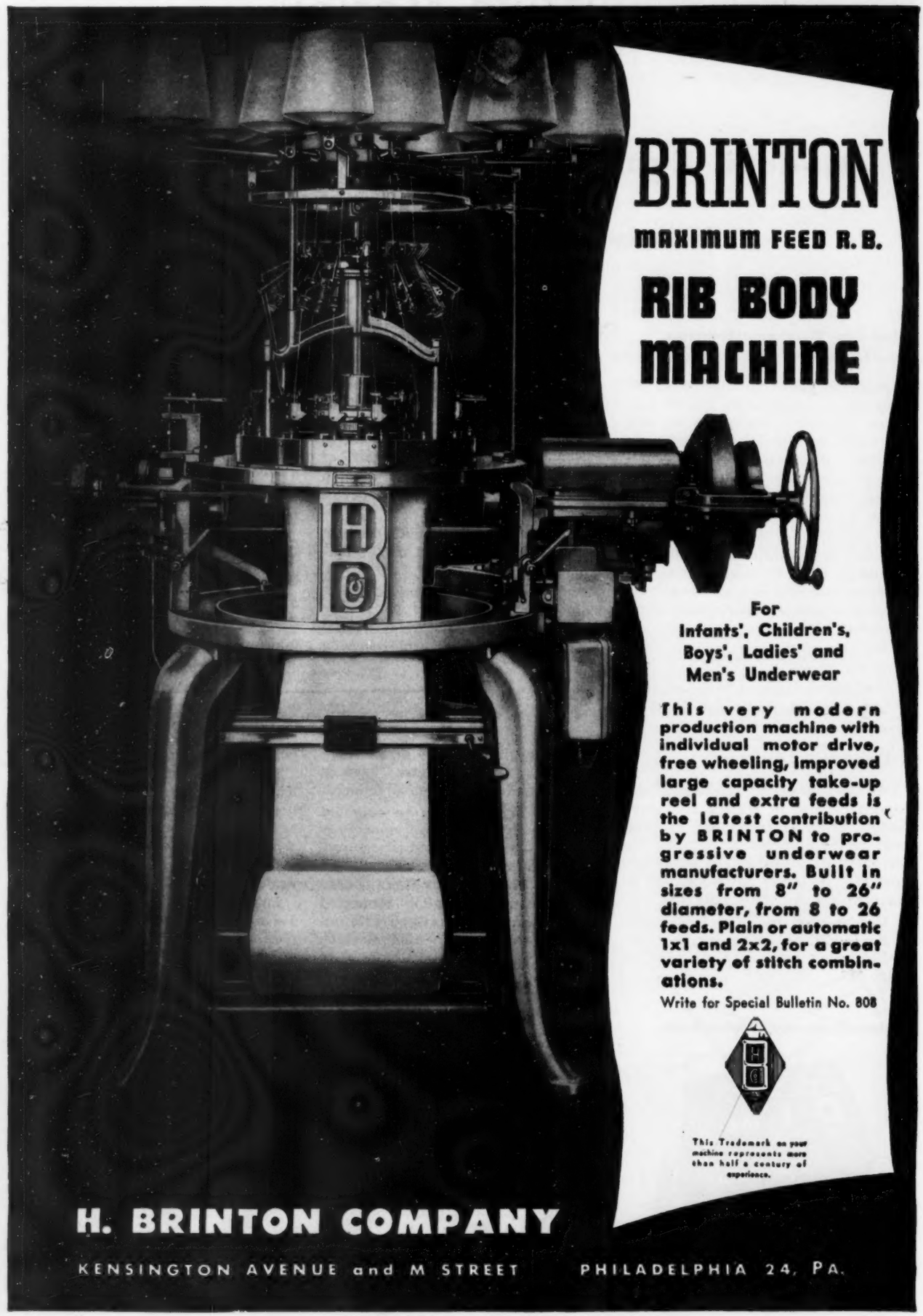
The machine may be operated by female or male operators. Only a short training period is required, and one operator can attend eight units (32 sections). There is only one manual operation connected with the entire knitting cycle, all other functions in this machine being fully automatic.

The installation of the Twin-Knitter requires little time since it comes fully assembled and only needs leveling off and setting to gauge before power is applied.

Robert Reiner, Inc., Weehawken, N. J.

For additional data, request item J-316, using business reply card on page 262.




BRINTON
MAXIMUM FEED R. B.
RIB BODY
MACHINE
For
Infants', Children's,
Boys', Ladies' and
Men's Underwear
This very modern production machine with individual motor drive, free wheeling, improved large capacity take-up reel and extra feeds is the latest contribution by BRINTON to progressive underwear manufacturers. Built in sizes from 8" to 26" diameter, from 8 to 26 feeds. Plain or automatic 1x1 and 2x2, for a great variety of stitch combinations.
Write for Special Bulletin No. 808
This Trademark on your machine represents more than half a century of experience.
H. BRINTON COMPANY
KENSINGTON AVENUE and M STREET PHILADELPHIA 24, PA.

if desired; (7) guards on all moving parts.

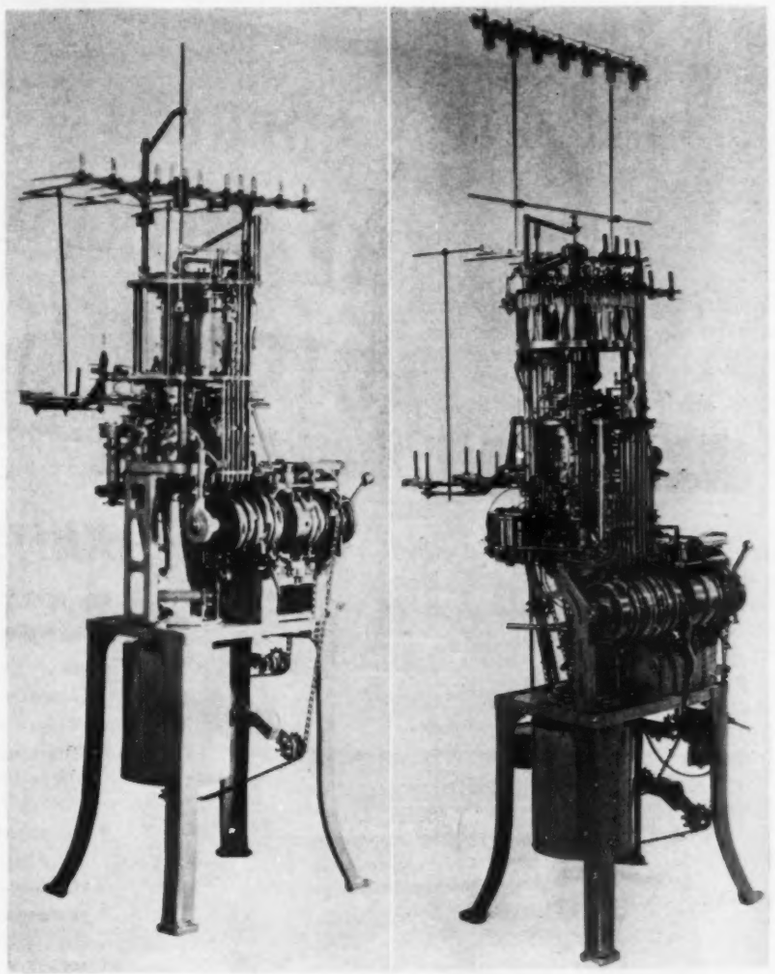
New attachments are as follows: (1) automatic brakes for warp beams, providing smooth even feed of yarn; (2) a "Stechkamm" or sinker bar used when producing very tight stitch fabrics—it is hinged and can be quickly and easily swung out of position for cleaning purposes or for replacing latch needle leads; (3) a "Schlagblech" or chopper bar attachment, used for cable stitches or "Lay On" patterns as on some polo shirt fabrics—this attachment operates smoothly, accurately and silently to more than double production possible on prewar machines, according to the manufacturer.

Kidde Manufacturing Co., Inc., Bloomfield, N. J.

For additional data, request item J-307, using business reply card on page 262.

Turning and Inspection Form Speeds Inspection, Reduces Picks

A new turning and inspection form is 48 inches long overall and about an inch in thickness. The stocking to be inspected is placed in a groove, usually about 2½ inches wide and ¾-inch deep, which runs down the center of one side. When the stocking is turned, the heavy welt yarn at the stocking-top, which is sized, rides well above the stocking in the groove. In this manner, the welt yarn cannot catch on the body of the stocking, it is claimed.



Left, Komet Links-and-Links machine for infants' socks. Right, Komet wrap machine for broad rib men's half hose.

Plastic hosiery turning and inspection form (Synthane).

In section, the form is nearly flat, with only a slight convexity on the ungrooved side. Use of paper-base Synthane, a laminated phenolic plastic machined and finished to a flawless surface, avoids snagging.

Synthane Corp., Oaks, Pa.

For additional data, request item J-332, using business reply card on page 262.

Two Komet Machines Introduced This Year

A new type Komet Links-and-Links machine turns out interesting Links-and-Links patterns in infants' hosiery. In addition, this machine produces many rib combinations in both the tops and boots of half-sox and anklets. The size range is from 4 to 6½.

The machine knits color designs in ribbed cuffs. Color-tipped heels, toes and welts may be also made.

Tentative production is calculated at eight dozen per eight-hour shift.

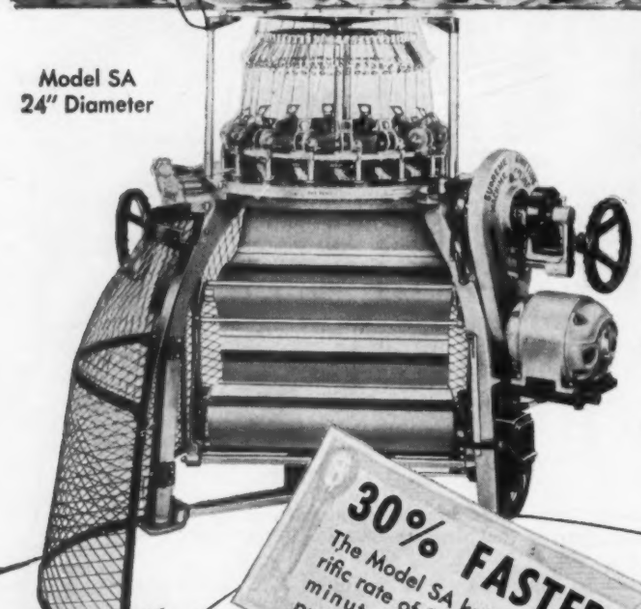
A new Komet Wrap Machine to satisfy a demand for colored clocks and all around embroidered patterns on Komet broad rib men's half hose, has also been developed.

This development embodies many improvements and safety devices for maximum economical operation independent of the addition of the wrapping mechanism, according to the manufacturer.

The wrapping mechanism provides ten steps in the pattern and up to twenty wrapping fingers. When making clocks, color within color, or a clock of one color encircled by design of another embroidered color is possible.

The selector drum is movable vertically on its shaft. Three butts on the drum jacks are provided for each selector finger. Therefore, the drum

SUPREME'S MODEL SA
THE WORLD'S FASTEST AUTOMATIC STRIPER...



Model SA
24" Diameter

KNITS DOLLARS FOR YOU

NO OTHER STRIPER GIVES YOU ALL THESE EXCLUSIVE MONEY-MAKING FEATURES.

- **New, Ingenious Automatic Striping System*** . . . Gives you world-beating production efficiency, versatility and durability.
- **Stationary Yarn Stand** . . . Assures trouble-free operation at continuous, super-fast knitting speeds. The cylinder and take-up revolve.
- **Automatic, Synchronized Cutters On Each Feed*** . . . Clip off the yarn that is going out of action, eliminating all waste.
- **Automatic Pattern Placer*** . . . Available on the SA, it lets you place patterns and plain or striped jersey wherever you want.

Write today for *free* cloth samples and the booklet "Variable Stripes and Plaids Pay."

*Patents Applied For

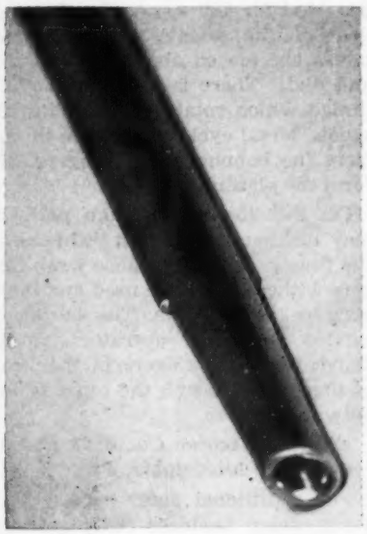
30% FASTER!
The Model SA knits at the terrific rate of 24 revolutions per minute for 30% greater production.

NO-WASTE!
Synchronized cutters eliminate all yarn waste. Cloth does not have to be reversed for finishing. Buyer gets all cloth for his money.

GREATER FABRIC VERSATILITY!
The Model SA, equipped with Automatic Pattern Placers, knits variable stripes, plaids, designs and "Pattern-Placed" cloth.

SUPREME
KNITTING MACHINE CO., INC.
107 JOHNSON AVE. BROOKLYN 6, NEW YORK, N. Y.

SK-122



TAPERED CARRIER TUBE DOES NOT TURN

A new tapered carrier tube has fins on the sides to prevent its turning in the specially-constructed carrier. The fins fit into the carrier, which has slots to receive them, thereby eliminating carrier tube turning.

Ernest A. Feustel, Inc., Highway 17, Lodi, N. J.

For additional data, request item J-314, using business reply card on page 262.

may be caused to rotate three complete revolutions without repeating. This feature permits great variety in design with a minimum of equipment and pattern layout time.

Scott & Williams Inc., 350 Fifth Ave., New York 1, N. Y.

For additional data, request item J-331, using business reply card on page 262.

Whitin Tricot Knitter Features Improvements

A high speed improved tricot knitting machine, designated Model C-2, features electrical controls, improved lubrication, and increased productive capacity. A higher quality knitted fabric can be manufactured on the Model C-2, according to the manufacturer.

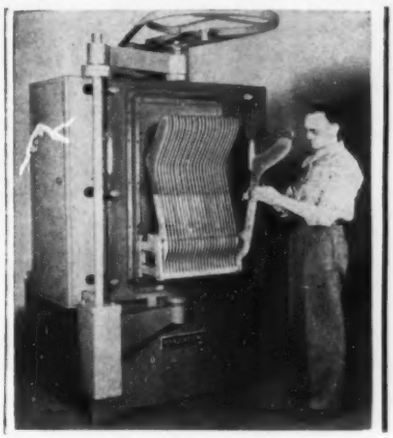
Among the developments which this newest model offers are accommodations for various sizes of warp spools including the 21-inch diameter spool, elimination of pattern wheel levers and placement of wheels at end of guide bars, and a heavy rigidly stressed frame which is said to reduce vibration to a minimum.

Whitin Machine Works, Whitinsville, Mass.

For additional data, request item J-338, using business reply card on page 262.

Vertical Retort for Nylons

A vertical retort with fully automatic electric controls is designed especially for preboarding half hose and anklets made of spun and filament nylon, or combinations of nylon and other yarns.



Vertical retort (Paramount).

Features claimed for the new machine are: compact design; the form and rocker arm are cast in one piece; new type single revolving door accommodates 72 forms, 36 mounted on each side; automatic electric controls provide controlled finish.

Paramount Textile Machinery Co., 131 S. Wabash Ave., Chicago, Ill.

For additional data, request item J-323, using business reply card on page 262.

Multiple-Feed Machine Makes Non-Run Fabric

The new B-17 latch needle knitting machine makes non-run fabric. It is multiple-feed, the 20-feed machine taking the 10-in. diameter. The machine is equipped with stop motion and has electric drive that is said to be foolproof.

Although the equipment will handle any type of yarn, it was manufactured especially for synthetic yarns to be used in ladies' underwear.

Tompkins Bros. Company, Syracuse, N. Y.

For additional data, request item J-333, using business reply card on page 262.

Multi-Design Ribber by Fidelity

The Fidelity Multi-Design Ribber is now available on an unrestricted basis, according to a recent announcement.

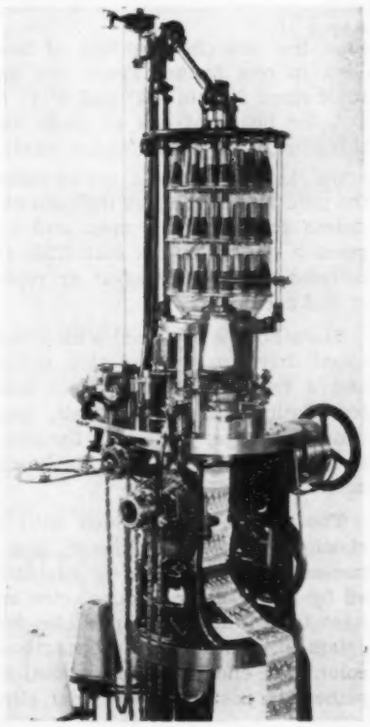
The original ancestor of the Model S-13-PE ribber was the Fidelity Universal Ribber which produced plain rib tops and was of a newly developed dogless construction.

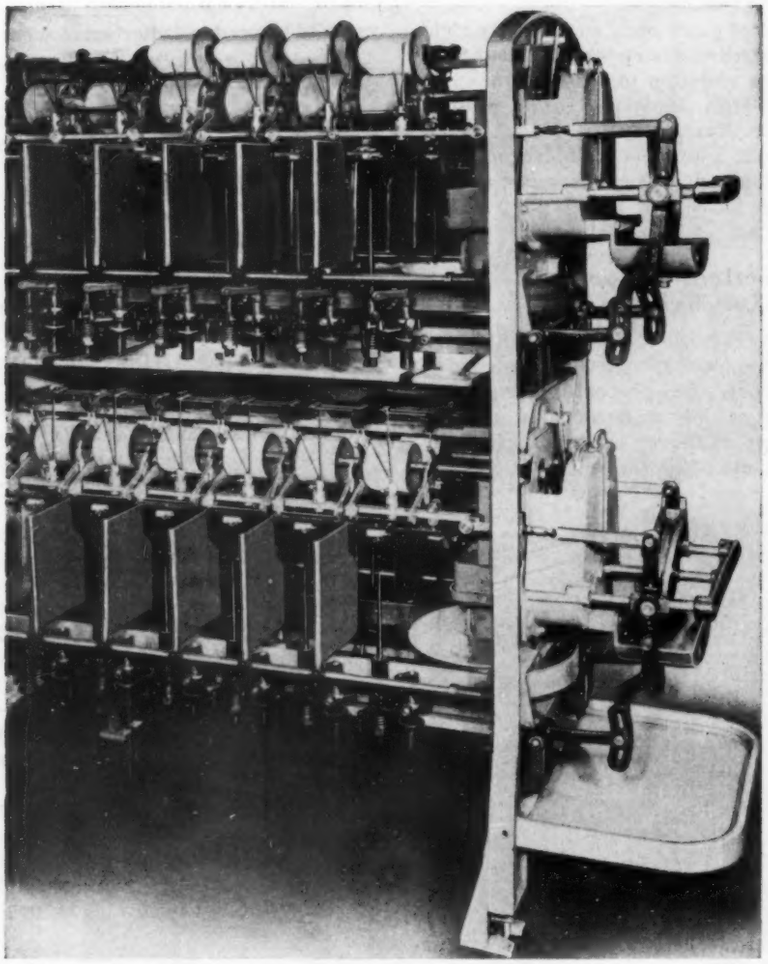
This was pioneered by Fidelity in order to eliminate all vibrating parts, substituting a single rotating member of novel construction and made up of only five parts. This allowed free feeding of yarn to the needles and prevented the dial from turning. The lack of vibration greatly increased the life of the machine and resulted in a more uniform quality of work, it is claimed.

The dogless was developed for free vertical movement of the dial in relation to the cylinder in order to expose the fabric.

Another improvement made pos-

Multi-Design Ribber (Fidelity).





The "King-Spool" twister (Fletcher).

sible the interchangeability of head sizes in one frame. There are two basic sizes: 2¾" to 4¾" and 5" to 7", and the heads of any of these machines may be interchanged freely.

On the dial cap is a device called the gate latch which, at the turn of a thumb screw, swings open and exposes a section of the dial. This facilitates the easy removal or repair of dial needles.

The ribber is equipped with a two-speed drive, a two-end stop motion and a two-end center bobbin table for plating effects and welt, loose course, selvage, picot and, for men's and boys' socks, a racking mechanism.

The machine is provided with an elastic laying-in attachment; also a two-color striper. This is supplanted by a five-color yarn selector and knot tying unit which provides four colors in addition to the background color. The ends of yarn are tied together in a positive square knot, eliminating press-offs due to ends of yarn slipping apart.

A single stop motion accommodates all five bobbins which are placed in the back of the machine entirely removed from the knitting element. With the yarn changer on the frame rather than on the head of the machine, there is greater accessibility to the needles. The yarn supply itself is stationary. There are no difficulties encountered with the yarns tangling with each other.

The Model S-13-PE can produce an unlimited number of fancy designed patterned ribbed tops with its 25-step patterning mechanism and 52 drum patterning selectors.

By a carefully designed method of carrying and directing the thread and controlling yarn changes at proper pattern points, 120 colors may be obtained in the vertical pattern. In addition to this, the machine enables the selection of any one of five colors in the horizontal progression of the pattern.

The bobbin holders on this machine are stationary. Spindles are provided for 120 spools, for the vertical plating effects, and the spool tables are placed above the cylinder and dial. There is only one moving thread which rotates around the 120 spools. Metal eyelets guide the thread from the bobbins to the fingers that form the plating stitches.

On the 25-step machine patterns may be changed without rethreading the fingers. This is because wrap fingers without butts are used and these stay in the machine. The butts are carried by finger operators placed above the wrap fingers in the head of the machine, with the butts facing outward.

Fidelity Machine Co., 3908 Frankford Ave., Philadelphia, Pa.

For addittional data, request item J-302, using business reply card on page 262.

Twister Builds Package Permitting Over-End Delivery

A twister has been developed for the throwster that utilizes a takeup package employing one head, thus permitting over-end delivery of the yarn.

The take-up package, designated the "King-Spool," is a bobbin with a cone head on a cylindrical tube, and can be made to any capacity conducive to good spinning.

The package is designed so that a tail used in magazining may be employed. The open end and open wind allow for easier and more thorough steaming, it is claimed.

Should an end be broken, or when the bobbin becomes full, the bobbin is automatically lifted from the cork roll.

Fletcher Works, Glenwood Ave. & Second St., Philadelphia 40, Pa.

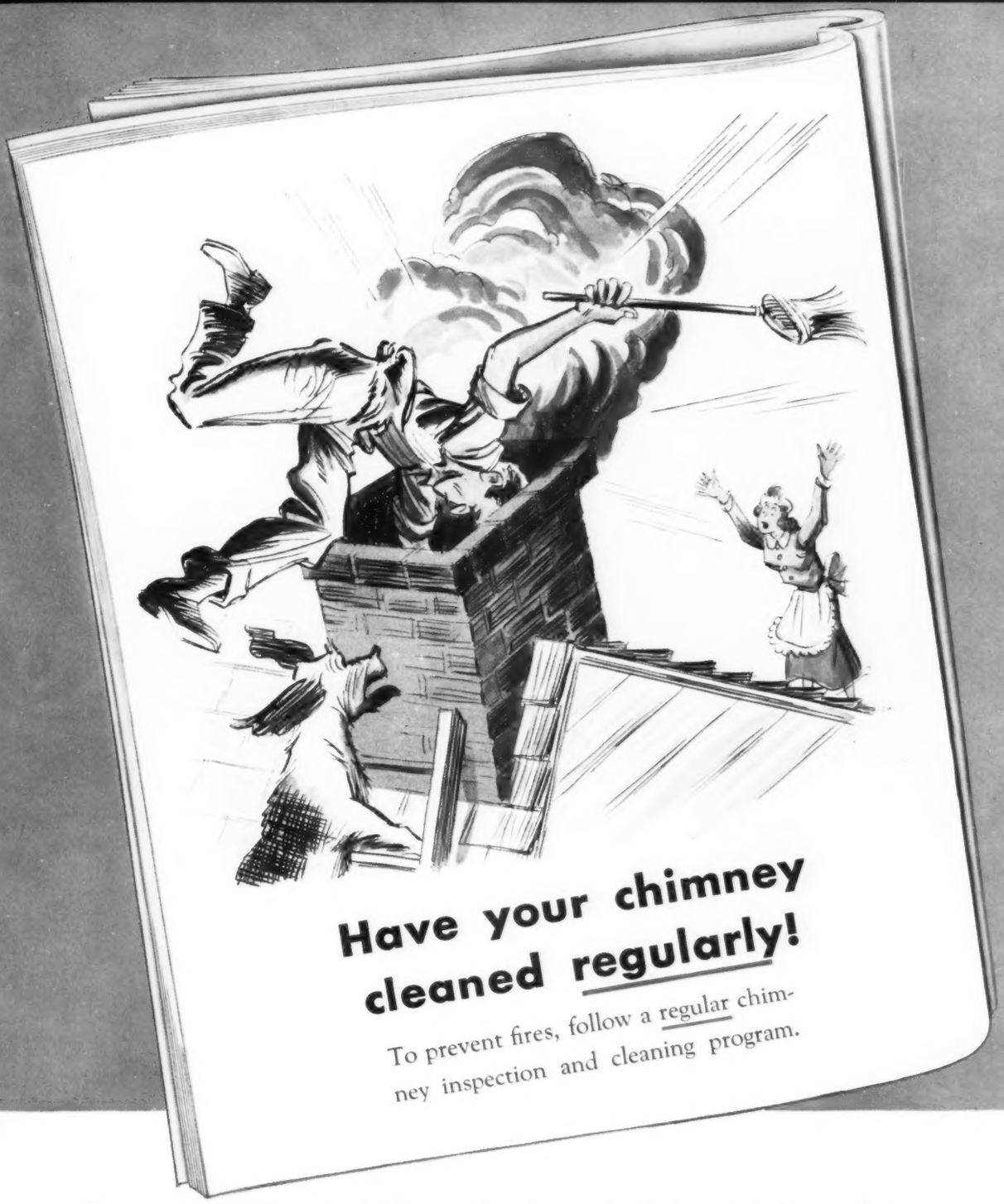
For additional data, request item J-326, using business reply card on page 262.

Dehumidifier Unit Uses Refrigeration Principle

A new, large capacity, semi-portable dehumidifying unit that operates on a refrigeration principle has been placed on the market.

Built around a one-third horsepower condensing unit, the new 53F Carrier "Humidry" has a capacity for removing 34 pints of moisture per day under room conditions of 80 F and 70% relative humidity.

The unit has proven to be of immense benefit where rust, mildew,



Have your Full-Fashioned Knitting Machines checked—regularly—to keep them at highest efficiency . . . Follow a regular program for reneedling and your needle bars are always in shape for better knitting . . . Follow a regular program for reconditioning and your plant is always at peak performance. We will be glad to discuss this matter of regularity as it applies to your mill operation.

TEXTILE MACHINE WORKS • READING, PA.

The "READING"
Full-Fashioned Knitting Machine

Where straightness is important

Check a Textile Spring-Beard Needle for straightness and you'll find precision straightness of butt, shank, stem and beard — straightness where it's vitally important. You'll see perfect spacing in the knitting bars—true alignment for top quality knitting.

Each stage in the manufacture of Textile Spring-Beard Needles is unerringly checked through Textile's quality controls, automatic and electronic which bring about this scientifically-accurate straightness.

Precision straightness is but one of the many advantages you receive through Textile's quality controls. For better quality knitting and for profitable knitting, specify Textile Spring-Beard Needles for your needle bars.

TEXTILE MACHINE WORKS, READING, PENNA.

Textile

SPRING-BEARD NEEDLES

For Full Fashioned and Warp Knitting

mold, or rot cause damage, deterioration or work delay, according to the manufacturer.

Carrier Corporation, Syracuse, N. Y.

For additional data, request item J-342, using business reply card on page 262.

Rubber Furnisher Eliminates Drag

A new device to furnish rubber yarn at a uniform rate to needles eliminates the usual drag of rubber yarn from the cone.

Uniformity of stretch and greatly improved appearance due to the more even stitches are results obtained in rubber tops made with this device, according to the manufacturer. It is suitable for installation on Komet Links-and-Links machines, automatic "HH-PW" machines, and other Scott & Williams models.

Scott & Williams, Inc., 350 Fifth Ave., New York 1, N. Y.

For additional data, request item J-339, using business reply card on page 262.

Portable Drive for Butt Seaming

A portable standard individual motor and stand for butt seaming is equipped with a single phase motor that can be plugged in anywhere.

It is mounted on casters making easy maneuverability possible. Another feature is the pilot light which goes on automatically when the motor is running.

American Safety Table Co., Inc., Reading, Pa.

For additional data, request item J-324, using business reply card on page 262.

Single Conveyor Hosiery Pre-Dryer

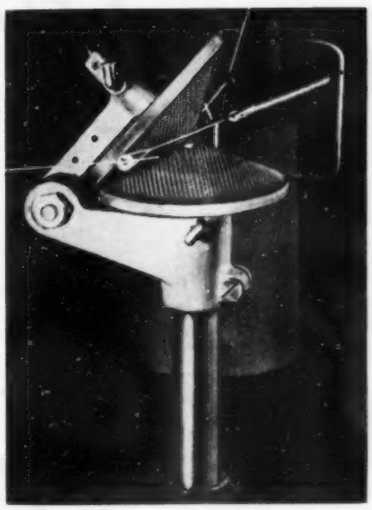
A single conveyor pre-dryer provides a speedy, controlled, and certain method for pre-drying heavy socks prior to boarding, according to the manufacturers.

Wet socks are loaded onto a two-foot-wide conveyor and carried through a drying enclosure. In the enclosure, it is possible to control temperature and air circulation to dry socks to a predetermined moisture content.

The conveyor has a capacity of 300 dozen pairs of socks per hour, depending upon weight of the sock and the speed and temperature at which the machine is operated.

Proctor & Schwartz, Inc., 7th St. and Tabor Rd., Philadelphia 20, Pa.

For additional data, request item J-328, using business reply card on page 262.



Rubber furnisher (Scott & Williams).

Automatic cutter (Supreme).

Synchronized Cutters Eliminate Waste

"No-Waste" knitting of variable stripes and plaids is now possible on the Model SA automatic variable striper and the Model SA-ROF variable stripe and plaid knitter as a result of the development of an automatic cutting mechanism.

Fabrics made on machines equipped with the device are said to be easier to finish since the cloth does not have to be reversed. Also, fabrics are smooth and even in texture.

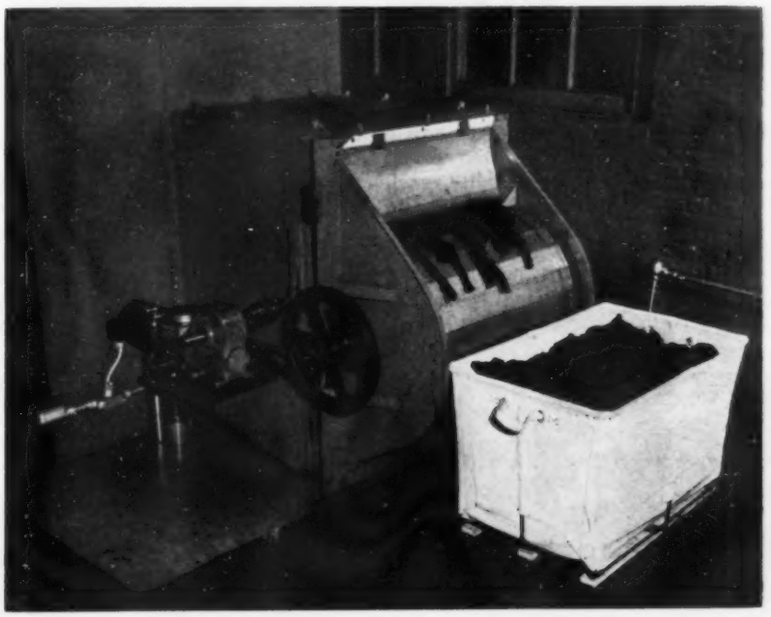
Supreme Knitting Machine Co., 105 Johnson Ave., Brooklyn, N. Y.

For additional data, request item J-321, using business reply card on page 262.

Tricot Pre-Setting Machine

A machine to pre-set rayon tricot fabrics has been developed by American Viscose Corporation's textile research department. It eliminates the

Single conveyor hosiery pre-dryer (Proctor & Schwartz).



A Variable and Profitable Producer REINER KAYLOOM

Turns out, with high speed and precision, merchandise that resembles either woven goods or knitted fabrics, for purposes as different as lacings, veilings, nettings, and upholstery.

Pattern control in this Reiner Kayloom makes possible designs that include fillingwise or warpwise stripes, plaids, diagonal or square checks, and other effects, in a limitless variety.

The machine is built for the use of five guide bars. It can also be delivered as a plain Raschel machine. In the warp knit line, Reiner also manufactures Tricot Machines, Simplex Machines, Creels and Warpers for all requirements.

Write for the richly illustrated Reiner catalog, or better still, arrange with us for an inspection of this fine machine at a nearby mill.

FOUNDED IN 1903

ROBERT REINER INC.

550-564 GREGORY AVENUE
WEEHAWKEN, NEW JERSEY

10 MINUTES FROM TIMES SQUARE. Take Bus Nos. 61, 67, 167 from the Times Square Public Service Terminal at 260 West 42nd Street, New York City. Get off at Pleasant Avenue, Weehawken, New Jersey. From there turn left and walk through the underpass up to Gregory Avenue . . . TELEPHONE: UNION 7-0502, 0503, 0504, and 0505. From New York City call LONGACRE 4-2217.

necessity for tacking and untacking selvages to prevent the setting of the curl in the edges of fabrics during dyeing, according to the announcement.

It results in straight course lines and prevents "crow's feet" and crease marks, it is claimed. Other advantages cited are: control of stability of acetate rayon tricot, improved hand, and the knitting of longer lots which may be dyed continuously.

Sprays of boiling water directed toward the edges of the fabric uncurl them and keep them uncurled until the goods move between two parallel steel plates for the setting process. Coincident with the sprays directed toward the edges, a third hot spray is directed downward onto the center section of the fabric for lubrication while it moves over the inclined steel entry plate. A cold spray plays across the entire width of the cloth as it emerges from between the plates to complete the setting.

Van Vlaanderen Machine Company, 370 Straight St., Paterson 3, N. J.

For additional data, request item J-337, using business reply card on page 262.

Transfer Applying Machine

A new transfer application machine features all-metal construction with stainless steel top.

A self-levelling iron overcomes uneven transfer impressions caused by any slight unevenness in the stack of goods, according to the manufacturer. The operator can adjust speed of machine by means of the selective speed control.

Paramount Textile Machinery Co., 131 S. Wabash Ave., Chicago, Ill.

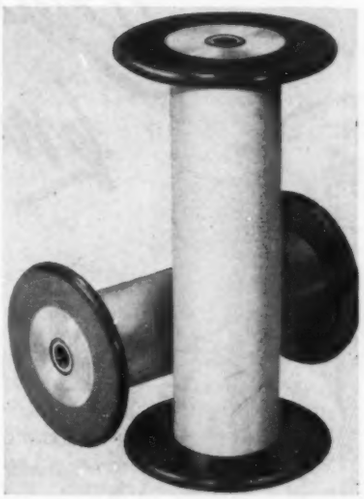
For additional data, request item J-322, using business reply card on page 262.

New Bobbin Features Replaceable Parts

The ability of the Tapercore bobbin to resist the "crush" of nylon or similar synthetic yarns and the fact that it is long-lasting, marks it as an important advancement in spinning or twisting bobbins, according to the manufacturer.

The outstanding feature claimed for the bobbin is that all parts are replaceable. Barrels are bakelite or aluminum construction, depending upon individual requirements. Heads are bakelite with metal inserts.

The bobbin is well balanced at even the highest speeds. It resists moisture, oils and grease and can be easily cleaned.



Tapercore bobbin has replaceable parts (Cloverleaf-Freeland).

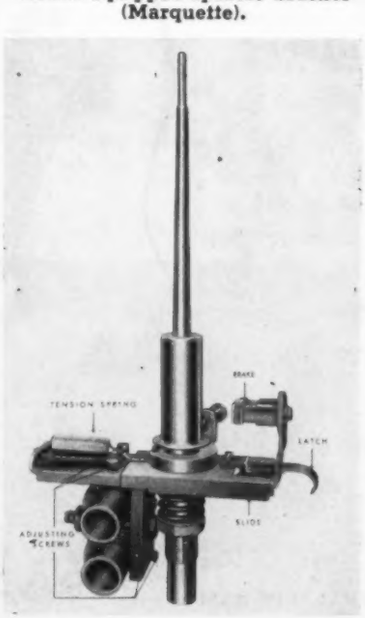
Cloverleaf - Freeland Corporation, Hazelton, Pa.

For additional data, request item J-313, using business reply card on page 262.

Brake-Equipped Spindle Bracket Frees Hands for Doffing

An improved spindle bracket for throwing frames features a spring-loaded brake which brings spindle and bobbin to a quick, safe stop, leaving both of the operator's hands free for doffing.

Brake-equipped spindle bracket (Marquette).



The bracket consists of a slide which carries the spindle on a supporting bracket toward and away from the driving belt in a straight-line movement. A simple coil spring provides even tension in bringing slide and spindle into contact with the belt.

The latch disengages spindle from driving belt, and anchors slide and spindle in a fixed position. At the same time the whorl is brought into contact with the spring-loaded brake plunger. Latch is easily released, whereupon the tension spring carries the slide forward so that spindle comes in contact with driving belt.

According to the manufacturer, this brake-equipped spindle bracket offers the throwster the following advantages: A standard roller bearing spindle, operating at high speeds with large packages, can now replace the conventional short shank spindle; spindle speed is constant and uniform; there can be no slack twist; the brake is applied automatically when the latch is drawn back; spindle is stopped quickly and safely. Spindles are easily plumbed and stay plumbed.

The bracket is designed for mounting on rail tubes or it can be supplied for mounting on flat rails.

Marquette Metal Products Co., 1145 Galewood Ave., Cleveland, Ohio.

For additional data, request item J-310, using business reply card on page 262.

Headless Package Tube Withstands Nylon's Crush

Headless package tubes made of phenolic plastics are reported to withstand the crushing action of nylon yarn.

As used on the new tapered-package, double-deck twister manufactured by the U. S. Textile Machine Co. of Scranton, Pa., they have an annular groove machined in the inner wall near each end. This groove is engaged by a spring-backed ball which holds the aluminum arbor snugly in the tube.

These tubes are readily adapted to arbors which have catches of other types, and are furnished in diameters to fit arbors of various sizes. Wall thickness in all cases is 3/32-inch.

Outer surfaces are rough-sanded to provide the most effective grip for the yarn as the package is started, and ends are color-coded with paint to help the user identify various yarns instantly.

An additional feature of the head-

Cut your knitting cost on

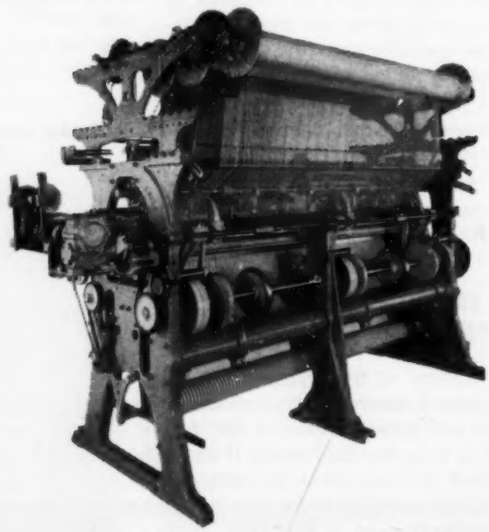
POLO SHIRT FABRIC

The *Kidde* Knitter will produce *more than double* the poundage of polo shirt fabrics, in comparison with prewar Raschel machines. The Chopper Bar on the *Kidde* Knitter operates smoothly, quietly and precisely. With the Chopper, mills are maintaining speeds up to 150 to 170 courses per minute. Without the Chopper Bar, mills are running up to 240 courses and producing 28 to 30 lbs. an hour.

That's typical of the new high production speeds obtained with the *Kidde* Knitter. A new drum drive and needle bar motion make these speeds possible—and the machine is designed throughout to withstand them.

Cut knitting cost on these fabrics too with a *Kidde* Knitter

ELASTIC FABRICS for corsets, girdles and brassieres. DRESS FABRICS. NETTINGS and VEILINGS. DISHCLOTH MATERIAL. LAUNDRY NETS. CURTAIN FABRICS. NARROW FABRICS. SHOE CLOTH. KNITTED OUTERWEAR FABRICS for sweaters as well as for polo shirts.



Free literature is available on the Kidde *Knitter. Write for your copy.*

The word "Kidde" is the trade-mark of Walter Kidde & Company, Inc., and its affiliated companies.

Kidde Knitter

KIDDE MANUFACTURING CO., INC. • BLOOMFIELD, NEW JERSEY

less type of tube is that it offers no impediment to thorough penetration by steam when the package is steamed to set the twist. Light weight, a characteristic of the phenolic plastics, also reduces shipping cost when packages are shipped from one mill to another.

Synthane Corp., Oaks, Pa.

For additional data, request item J-312, using business reply card on page 262.

Humidifier Unit Evaporates Three Gallons Water/Hour

The Model 30 humidifier unit, recently announced, evaporates approximately three gallons of water per hour. Electrical consumption is approximately 230 watts, and all that is needed is connection to a water supply and electric current.

Walton Laboratories, Irvington 11, N. J.

For additional data, request item J-344, using business reply card on page 262.

High Speed Two-Thread Chain Stitch Machine

A new two-thread chain stitch machine with higher speed, greater operating convenience and low maintenance cost, has been developed which is said to be extensively used throughout the men's apparel field, particularly work clothing, and in many other lines.

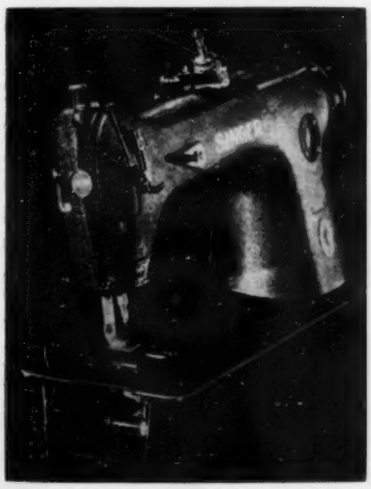
Speeds as high as 5500 stitches per minute are attainable, according to the manufacturer.

By slanting the arm of the machine eleven degrees to the rear from the usual vertical position, much improved clearance and visibility for the operator has been created. The slant arm also provides better feeding of work at all speeds, because of the improved relationship of feed dog and presser foot during the feeding stroke.

Singer Sewing Machine Co., 149 Broadway, New York 6, N. Y.

For additional data, request item J-343, using business reply card on page 262.

Chain stitch machine (Singer).



Knit Shrinkage Gauge

The object of the newly developed Knit Shrinkage Gauge is to evaluate knitted materials from the standpoint of restorability as normally encountered in end use conditions. Normal restoration is accomplished through one or more of the factors of handling, ironing and drawing onto the body. The gauge serves to measure the force necessary to restore a given area of fabric to any predetermined percentage of tolerable shrinkage and so enables the fixation of standards based on restorability.

The shrinkage gauge consists of an inflatable diaphragm in which is set a circle of sample mounting pins, an air pressure and measuring system, and an automatic trigger gauge to release the air pressure when a predetermined sample dimension has been reached.

United States Testing Co., Inc., Hoboken, N. J.

For additional data, request item J-336, using business reply card on page 262.

Warp Conditioner Emits "Rain-Free" Air

A warp conditioner for high speed warpers operates on the principle of molecular suspension and releases air forms 500 times finer than the finest spray, it is claimed. This humid "rain-free" air is said to penetrate the yarn and remove the concentrated static, prevent loose and tight ends, rolling ends, ridges and valleys, cause less frequent stoppage, and result in smooth beams and volume production.

Only water and electricity are needed for the operation of the machine, and it can so be arranged that it will operate in conjunction with the warper. Funnels are made to fit any size warper.

Air-Perme-Ator Mfg. Co., 300 Preakness Ave., Paterson 2, N. J.

For additional data, request item J-301, using business reply card on page 262.

Warp conditioner (Air-Perme-Ator).

Cloth Spreader for Tricot Fabrics

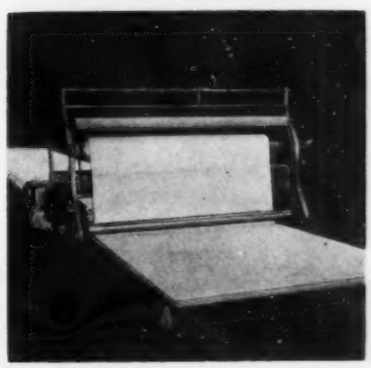
An electrically operated cloth spreader to lay out tricot fabrics without stretch or tension, in preparation for cutting, is now in production.

The machine is designed to handle doubled tricot materials as used in the apparel industries, and to eliminate the difficulties encountered while laying up the goods. It is push button controlled and requires no manual handling during its operation, running on a geared track along one side of the cutting table.

The machine rides up and down the table, laying the goods quickly and accurately, automatically reversing at the ends of each layer. It is halted automatically at the end of the piece of goods or when there is a break in the cloth. The machine can be stopped whenever necessary by the operator through the use of a "stop control," a wire that runs under the entire length of the table.

Machines are made up to a maximum width of 72 inches, but "stock" models are in the 60-inch width to handle the 112" and 120" single widths which are doubled over to

Tricot fabric spreader (CRA).



The First of a Series of New Knitting Machines

Designed to Expand Your Hosiery Market

SCOTT & WILLIAMS *Announces*

the New Infants' Komet Links-and-Li

The first of the *new* Infants' Komet Links Machines in 2½" and 2¾" diameters, in fine and coarser gauges for knitting infants' half-sox and anklets in sizes from 4 to 6½, will soon be ready for shipment.

For many years infants' hosiery has been produced by machines of limited style and pattern scope. These new machines, however, produce an almost endless variety of Links-and-Links patterns and rib combinations, in both the tops and boots of half-sox and anklets.

With such a varied line of quality infants' hose, alert mills will have the competitive advantage that will win them a larger and more profitable share of this vast market.

Moreover, manufacturers of infants' hosiery are now freed from the difficulty of two machine operation and the staggering expense of hand transfer knitting. **This new machine is completely automatic.** Because of its double feed features, it has an extremely high production rate which means greatly lowered knitting costs.

Call your Scott & Williams representative for samples of hosiery and complete details on the S&W Infants' Komet Links-and-Links Machine.

S&W

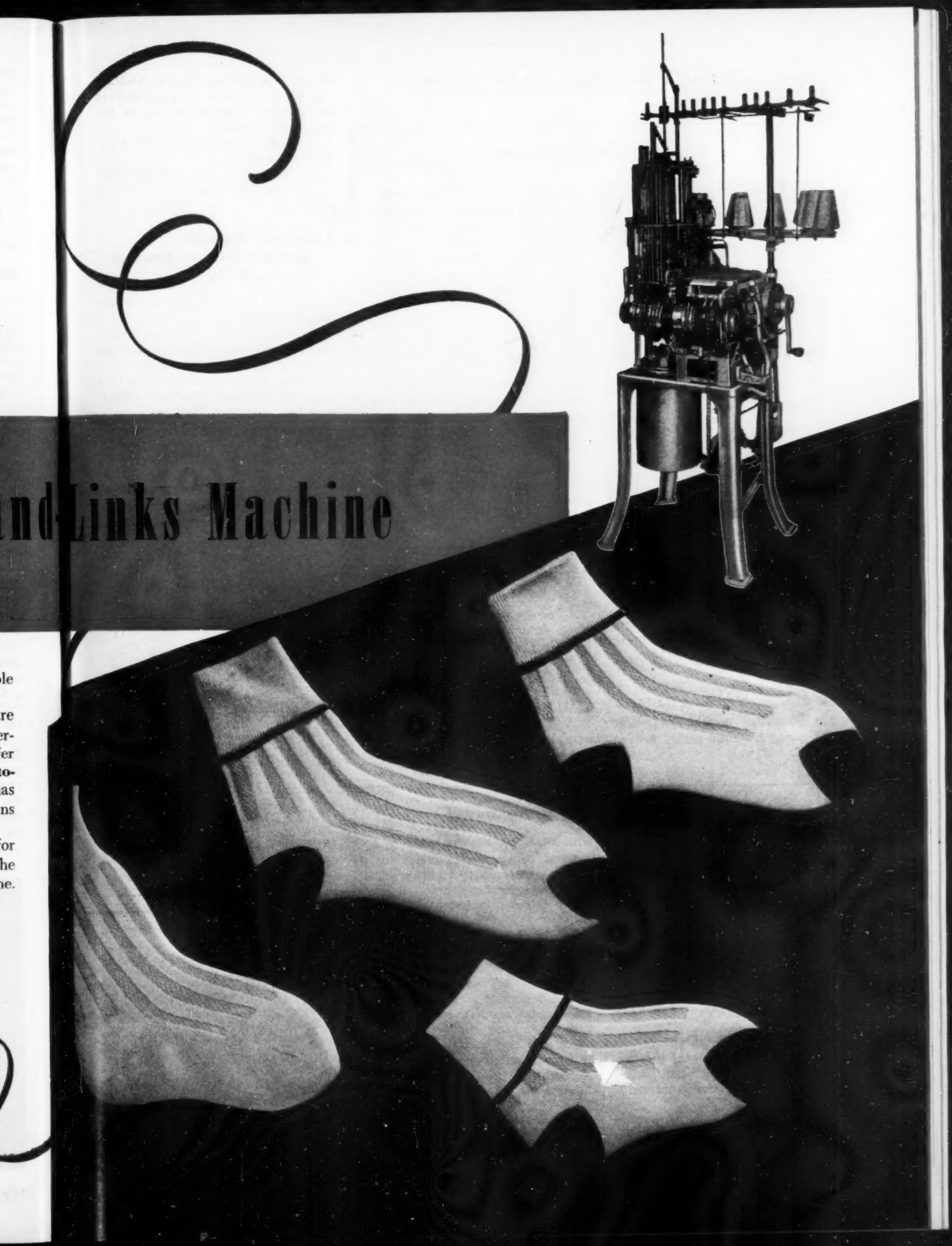
SCOTT & WILLIAMS, INC.

Established 1865

MAIN OFFICE AND PLANTS: LACONIA, NEW HAMPSHIRE

Sales Office: Empire State Building, New York 1, N. Y.

Divisional Offices: High Point, N. C., Reading, Pa., Chattanooga, Tenn.


nd-Links Machine

PEDESTAL HOSIERY SEAMER

Pedestal mounted hosiery seamers in the Class 41300 machines for the full-fashioned hosiery field have been made available.

Advantages of the new pedestal hosiery seamer start with increased comfort for the operator, according to the company.

Because the new model does not have to be fastened to the floor, it may be adapted to any room arrangement. Less space is required, and installation is simplified because table erection and motor installation are eliminated.

Union Special Machine Co., 400 North Franklin St., Chicago, Ill.

For additional data, request item J-315, using business reply card on page 262.

56" and 60", respectively.

The machine is also adaptable without adjustment to the laying up of tubular knit fabrics, and can handle two pieces of goods with a maximum width of 29" on each piece, at the same time.

Cutting Room Appliances Corp., 45 West 25th St., New York 10, N. Y.

For additional data, request item J-304, using business reply card on page 262.

Attachment Makes Stripes in Seamless Hose

A newly developed Ornamental Wrap Attachment for Scott & Williams 51.7 gauge seam-free nylon machines has been announced.

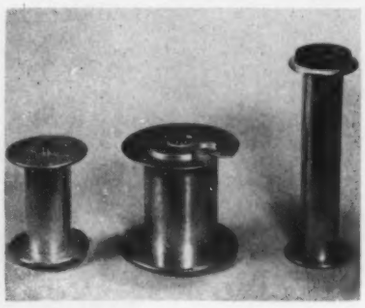
Hose produced by machines fitted with this new attachment have a perfectly straight line wrapped down the stocking leg to the top of the heel only.

A nylon thread of the same, or different, size as that used in knitting the leg is wrapped on a number of the needles (usually three) in the center of the back.

Scott & Williams, Inc., 350 Fifth Ave., New York 1, N. Y.

For additional data, request item J-340, using business reply card on page 262.

BOBBINS FOR PROCESSING NYLON YARNS



Shown here are three bobbins recently developed for the processing of nylon yarns. Left: small standard type of aluminum stainless steel gudgeon take-up shaft or bobbin; center: larger take-up shaft with stainless steel gudgeon with a transfer attachment so that continuous over-end delivery may result satisfactorily; right: nylon primary processing bobbin for use where extreme pressures are present.

This latter bobbin has aluminum heads as well as barrel and will satisfactorily resist 85,000 pounds pressure against the barrel and up to 12,000 pounds pressure against the heads without failure and without trapping yarn between the heads and the barrels, according to the manufacturer.

Lestershire Spool & Mfg. Co., Johnson City, N. Y.

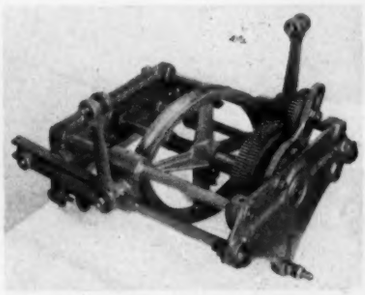
For additional data, request item J-309, using business reply card on page 262.

Traverse Motion Assemblies for Atwood Up-Twisters

Recently developed is a new Traverse Motion Assembly for the Atwood Model No. 100, No. 110, and Utility up-twisters. These motions feature greater rigidity of the traverse motion assembly, thereby achieving a much smoother traverse than has heretofore been available. This positive action results in more uniformity of the finished package, it is claimed.

The units are completely assembled at the factory.

The traverse motion assembly for the Utility up-twister has a new traverse lever connection which operates with a minimum of frictional resistance, thus producing a very smooth and even traverse.



Up-twister traverse motion assembly (Universal).

Atwood Division, Universal Winding Co., Providence, R. I.

For additional data, request item J-303, using business reply card on page 262.

Surface Active Wetting Agent

A new surface active agent is known as Surfax 1288. It is a wetting agent which also has excellent rewetting properties, according to the manufacturer. It has no marked detergent properties and is reported to be effective in extremely low concentrations.

Possible uses include compressive shrinkage; wetting out and dyeing ho-

Never seen —always visible

Uniformity at the point where the stitch is laid is an unseen quality in knitting needles that is always visible in the knitting itself. For the size of each needle at this point determines the size of the stitch it lays—and only when all needles are uniform here are all stitches uniform in the knitted fabric.

Torrington maintains uniformity at this point by means of special precision equipment. This is one of the reasons why you can rely on the needles in the Red and Green box to produce good knitting. Insist on Torrington Needles.

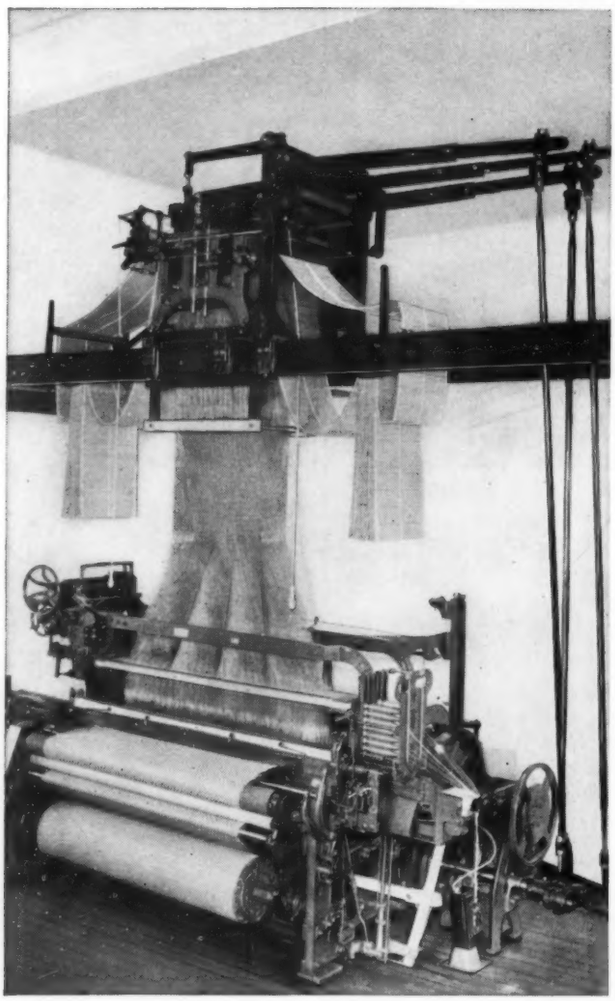
THE TORRINGTON COMPANY, Torrington, Conn., U. S. A.
Established 1866

Branches: New York • Philadelphia • Chicago • Greensboro, N. C. Boston • St. Louis • Toronto, Canada • *Pacific Coast Representative:* E. G. Paules, 1762 West Vernon Ave., Los Angeles 37, California. Broadgate House, 7-10 Eldon Street, London E. C. 2, England.

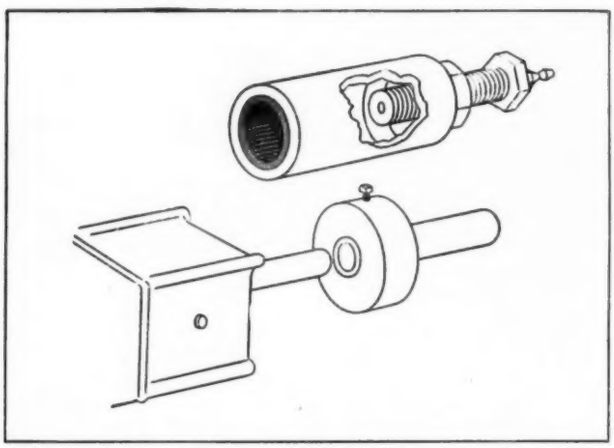
TORRINGTON

SPRING BEARD NEEDLES • SINKERS • DIVIDERS • SPLIT DIVIDERS

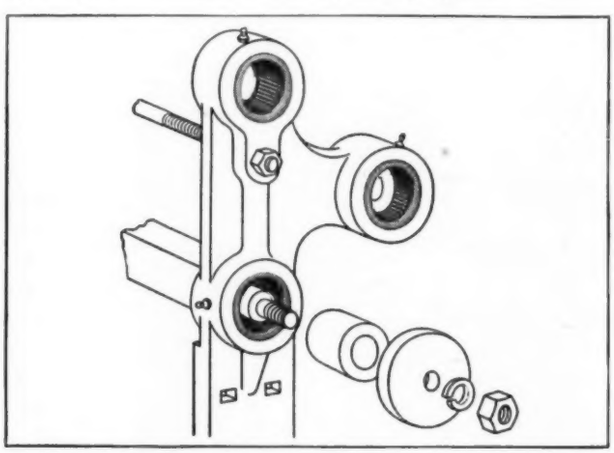
Torrington Needle Bearings Insure Accurate Pattern Control in Crompton & Knowles Jacquards



Crompton & Knowles Jacquards make possible high speed weaving of intricately patterned fabrics. They manipulate as many as 14,000 warp ends at a rate as high as 150 times a minute. Pattern is controlled by punched cards passing over a four-sided wood cylinder, designed with a series of holes 0.192" apart.



To produce perfect patterns in the fabric, accurate cylinder alignment is insured by the use of Torrington Needle Bearings as sketched above. Needle Bearings provide smooth, anti-friction operation, eliminating wear at the cylinder gudgeons.



Torrington Needle Bearings are also used in the lifting and cylinder levers. Loads are heavy. Needle Bearings provide a large area of contact surface for tremendous radial capacity. Lubrication and maintenance are greatly reduced, since the turned-in lips of the shell conserve lubricant and keep out lint and fly.

Your textile equipment, too, can benefit from the efficient operation, effective lubrication, and long service life of Torrington Needle Bearings. Our engineers will gladly help you adapt these compact anti-friction units to your designs. Write us today. THE TORRINGTON COMPANY, Torrington, Conn., or South Bend 21, Ind. District offices and distributors in principal cities of the United States and Canada.

TORRINGTON *NEEDLE* **BEARINGS**

Needle • Spherical Roller • Tapered Roller

Straight Roller • Ball • Needle Rollers

siery, cotton, wool, synthetic yarns, and all types of knit and woolen piece goods.

E. F. Houghton & Co., 303 W. Lehigh Ave., Philadelphia 33, Pa.

For additional data, request item J-327, using business reply card on page 262.

Productimeter Installed on a Circular Knitting Machine

A Model 3-4-N-76-1-L-AC Predetermined Productimeter on a Scott & Williams 17" circular knitting machine is geared to the tension feed rolls so as to measure full yards of the material knit.

The predetermined feature of the counter permits the required production quantity to be set up on a number of machines handled by one operator. When the desired yardage has been knit, the counter automatically shuts off the machine, thus eliminating any possibility of an overrun or underrun.

Durant Manufacturing Co., 1929 North Buffum St., Milwaukee 1, Wis.

For additional data, request item J-305, using business reply card on page 262.

Looper Light Gives No-Glare Vision

Specially designed to bring concentrated light at the needle point of the looper, the new Looper Light spots 300 foot candles of light at the dial.

According to the manufacturer, the light lessens eye strain, gives no-glare vision, and generates little heat.

Textile Trimming & Boarding Machine Co., Front and Green Sts., Reading, Pa.

For additional data, request item J-335, using business reply card on page 262.

Anti-Static Agent for Processing Plastics

Static electricity prevalent in the manufacture of fabrics from plastics such as nylon, Saran, etc., can be minimized or overcome by passing the thread through a water solution of Polyethylene Glycol 400 (Mono) Laurate before it passes through the needle, according to the manufacturer of the pale yellow, mono ester of polyethylene glycol 400 and lauric acid.

Because of its stability in hard water and prevention of lime soap precipitation, the chemical is suggested as an added detergent and emulsifying agent in scouring, desizing and all washing operations.

Glyco Products Co., Inc., 26 Court St., Brooklyn 2, N. Y.

For additional data, request item J-306, using business reply card on page 262.

Automatic Washer for Flanged Bobbins

The No. 89 Automatic Bobbin Washer is a ten-spindle machine capable of washing flanged bobbins up to 12" traverse and 5¾" in flange diameter at a production rate of 28 bobbins per minute.

The use of a cleaning solution which has a 140 degree flash point and is non-toxic, assures safety in machine operation. Cleaning solution has no harmful effect on yarn, either natural or synthetic, it is claimed.

Machine is entirely automatic in operation as bobbins are fed into slide hopper where they roll into pick-up position. Headstock and tailstock spindles pick up bobbins and revolve them over circular brush carrying cleaning solution, gently brushing the entire surface of the bobbin. Bobbins are then carried over wiping assembly for further cleaning and drying.

J. M. Nash Co., 2360 North 30th St., Milwaukee 10, Wis.

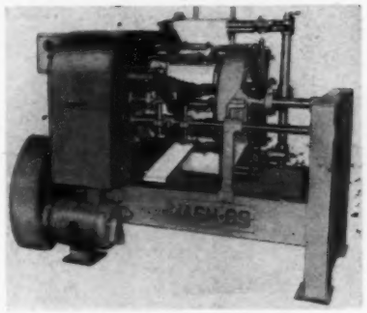
For additional data, request item J-311, using business reply card on page 262.

Sectional Warper for Use with Kidde Knitter

A compact Sectional Warper, suitable for use in conjunction with the Kidde Knitter, will handle spools with up to 14" diameter flanges and with a traverse of 13" to 15" between flanges. Arbors are made to accommodate spools with 2¾" bore.

The compression roller is supplied to fit the spools to be used. It is a spiral wound, felt covered roll, 36" in circumference. A counter mounted on the hub gives an exact count of the actual yards of yarn put on a spool. The roller fits accurately between spool flanges to prevent build up of yarn next to the flange. It can be locked in the outer position and is released by means of a foot pedal.

In order to make spools with exactly the same yardage on each, a predetermined rounds counter is supplied. There are two ways of varying the speed of the warper. With these two methods of speed adjustment, extreme ranges are possible. As the diameter of the spool increases with subsequent greater load on the motor, the motor slows down and compensates for this increased diameter, resulting in a practically constant yarn travel.



Bobbin washer (Nash).

A stop motion "plug in" is provided, whereby the spool is instantly stopped when an end breaks on the creel, or between creel and warper. By means of a solenoid and clutch arrangement the spool alone is instantly stopped whereas the motor and drive come to an idling or gradual stop. This relieves the motor and drive of strains encountered in instantaneous stops from high speeds and relieves the brake of the load necessary to stop the motor.

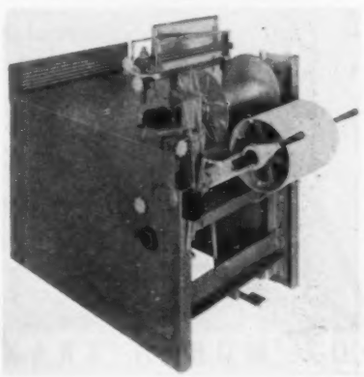
A 300-end porcelain guide panel is provided for concentrating the ends from the creel at the warper. An adjustable fan reed (according to gauge required) is mounted in an adjustable carriage so that coarse and very fine adjustments can be made.

A smooth, flat bar for pasting of ends before cutting off is provided immediately after the reed.

Kidde Manufacturing Co., Inc., Bloomfield, N. J.

For additional data, request item J-308, using business reply card on page 262.

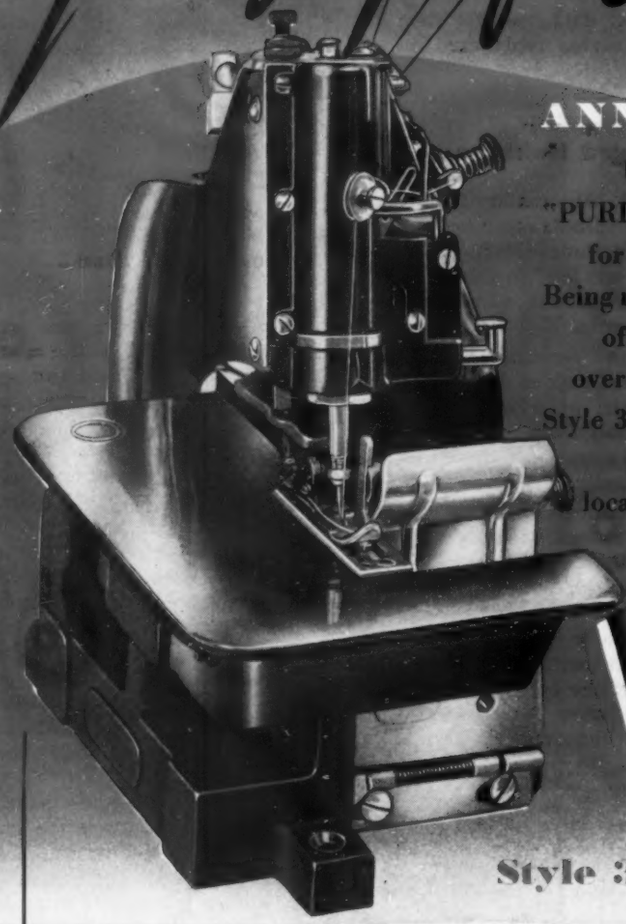
Sectional warper (Kidde).



Yours for Perfect Seaming!

ANNOUNCING . . .

Union Special leads again with the new "PURL-RITE" overseaming finish!—Yours for *finer finishing* of all kinds of knit fabrics. Being made available as an improved feature of Union Special's widely used Class 39200 overseamers, it is initially offered in Style 39200 AC for seaming knitted undergarments. For the complete story, see your local Union Special representative or write.

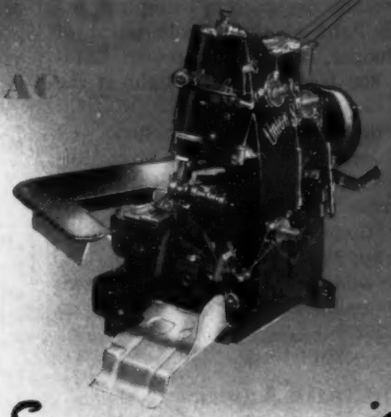


THE NEW UNION SPECIAL

"Purl-Rite"

OVERSEAMING FINISH

Style 39200 AC



NEW! IMPROVED!

Freedom from stitch distortion! Seam perfection maintained over varying thicknesses, around curves.

Finer appearance! Purl of stitch located uniformly on edge of fabric.

Additional elasticity! Needle thread pulled up tight, but with chain elastic.

Freedom from operating difficulties! Easier threading. Smoother, easier thread handling.

Controls compensate for thread irregularities.

No sacrifice in machine speed or production.

for Seaming Knit Fabrics!

The improved Style 39200 AC overseamer for making the new "PURL-RITE" finish (Stitch Type 504) is specially designed for seaming the lighter weights of flat knit, warp knit, and ribbed knit fabrics.

Union Special MACHINE COMPANY

407 NORTH FRANKLIN STREET • CHICAGO 10, ILLINOIS

When writing advertisers, please mention TEXTILE INDUSTRIES • OCTOBER, 1949

New Line of Twisters

A high-speed headless package twister builds up yarn into tapered or straight-end headless packages from 8 ounces to 32 ounces in size. The machine accommodates bobbins or perforated spools on the spindles. For maximum yarn economy, each package is individually controlled by an automatic stop motion device.

A new and improved spindle swing unit has an eight position spring adjustment so that tension can be regulated permanently to produce a constant spindle speed. Each unit has a specially designed pull-out lever and a floating brake to stop the spindles slowly. A finger tip release quickly frees the spindle to running position. This device is individually operated without interference from or with any of the other units.

A lapless fabric or cord belt is used on each deck to drive the spindles. Uniform belt tension is maintained at all times by the floating motor mounting, assuring a uniform spindle speed. Each spindle is tensioned to the driving belt and held in position by idlers equipped with anti-friction bearings. Balloon separators are provided between each spindle.

Only one gear has to be changed for each given twist.

Also marketed by the same company is a jumbo doubler twister which is a newly improved, versatile production unit designed for building of combination yarn packages up to 1½ pounds. Doubling and twisting are performed in one operation for improved throwing of combination yarns of from two to twelve ends with up to twelve or more turns per inch.

The machine is especially designed to produce yarns from silk, nylon, rayon, acetate, etc. It handles packages from 8 ounces to 1½ pounds.

Jumbo double deck twisters, simplified in design, are now available for high-speed twisting to the finest of deniers. These machines are capable of handling yarn packages from 8 ounces to one pound (take-up spool or headless package or both). An automatic stop motion for each individual position is supplied in connection with headless packages.

U. S. Textile Machine Co., Scranton 8, Pa.

For additional data, request item J-317, using business reply card on page 262.

Machine Preboards and Boards in One Operation

A machine for finish-boarding of all types of hosiery has been improved by the addition of equipment which is said to permit preboarding and finish boarding in a single operation. Basically, this is the same machine as previously described in this magazine (Nov., 1948 issue, page 177), with the addition of a vacuum system.

Turbo Machine Co., Lansdale, Pa.

For additional data, request item J-334, using business reply card on page 262.

"Daylight Fluorescent" Nylon and Acetate Yarns

A line of nylon and acetate yarns with high-visibility colors has been developed.

Designated "daylight fluorescent," the yarns are presently available in six colors: Neon Red, Fire Orange, Arc Yellow, Saturn Yellow, Signal Green, and Horizon Blue.

According to the manufacturer, the glow of the yarns is due to the fact that the yarns not only reflect the visible light from the sky and sun in the same manner as ordinary colored materials, but they also convert the invisible ultraviolet and other short wave radiations from the sun to visible light, thereby multiplying the intensity of the color seen by observers.

Aberfoyle Mfg. Co., 123 South Broad St., Philadelphia, Pa., exclusive suppliers.

For additional data, request item J-319, using business reply card on page 262.

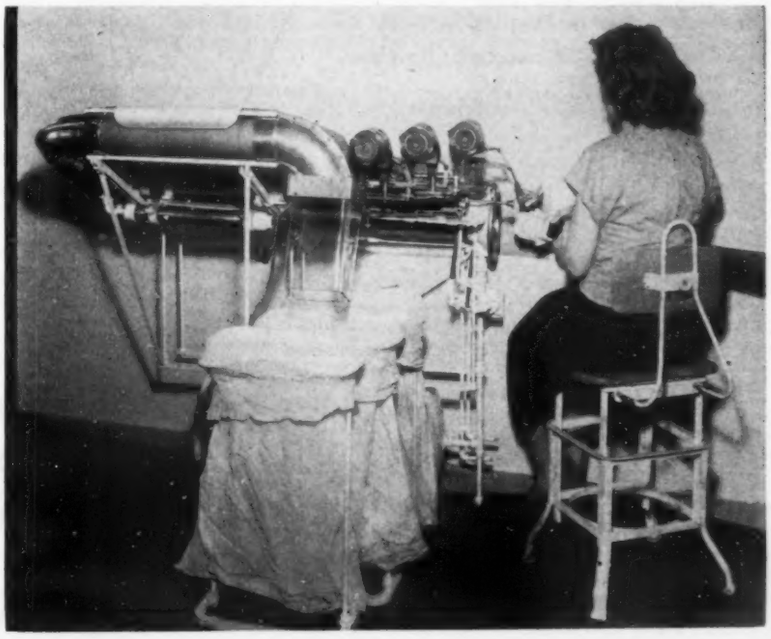
MACHINE SEPARATES HOSE BY LENGTH

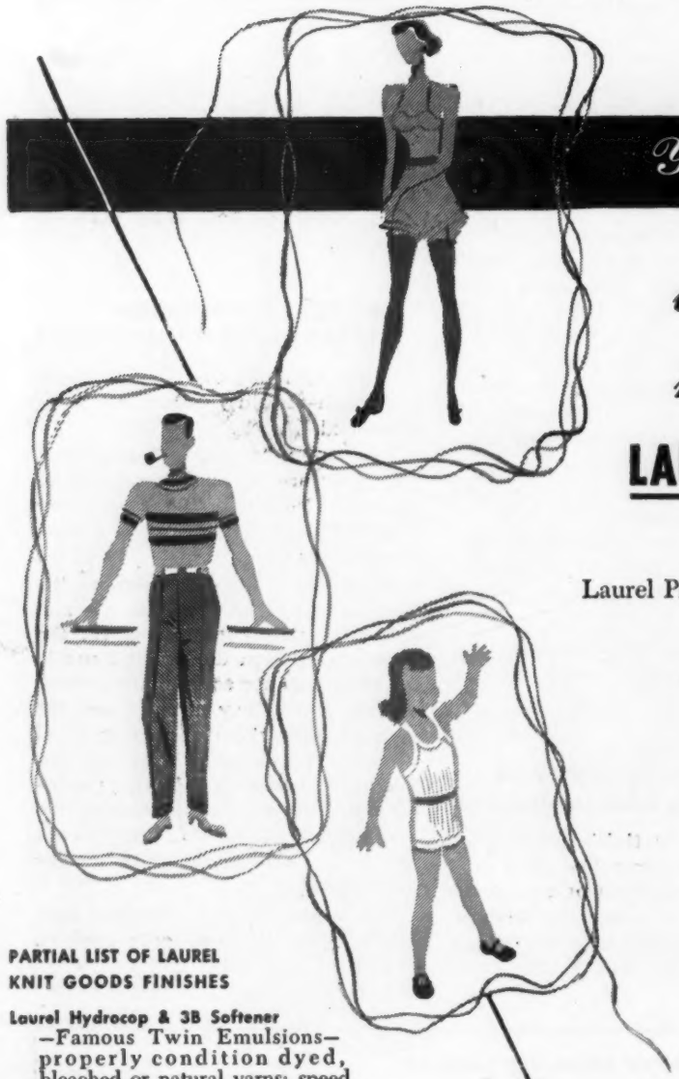
A new machine, which is used in conjunction with the expanding inspection form, receives the stockings from the form, draws them into the machine by suction, and by pedal control from the inspector drops them into one of three containers according to length of the stocking, counting the number during the operation.

The hosiery inspecting form is located adjacent to the counting and assorting machine. The operative draws the hose on the form, gauges it according to length, slides the stocking toward the end of the form, where it is drawn into the tube on the counting machine.

Edward R. Ammon, Inc., 616 N. 8th St., Reading, Pa.

For additional data, request item J-318, using business reply card on page 262.





Your knitting

will be smoother, faster, more profitable with

LAUREL ***soaps, oils, finishes..***

Laurel Processing Agents increase production and improve the appearance of your knitting—be it hosiery, underwear or outerwear, because they are tailored to your specific problem.

Known and used throughout the textile industry for quality and efficiency as well as low cost, Laurel Products are developed to meet dyeing, bleaching and finishing requirements of all fibers—natural, synthetics and combinations. Laurel Technicians are well qualified by their training and long experience to render you assistance. They will gladly cooperate with you as they do with hundreds of knitters in securing the just right combination for more efficient and profitable finishing of knit goods. Call, wire or write for practical recommendations.

PARTIAL LIST OF LAUREL KNIT GOODS FINISHES

Laurel Hydrocop & 3B Softener —Famous Twin Emulsions—properly condition dyed, bleached or natural yarns; speed twist-setting; produce more even running yarns; improve knitting qualities.

Laurel Brand Soaps — Versatile, superior, effective in all processing steps

Laurel Textile Oil—Effects complete penetration, level dyeing, softness.

Laurel Hydrosol — Excellent scour and detergent. Yields cleaner, more even dyeings. Mildew-resistant.

Laurel Nylon Finishes—An efficient group of nylon processing agents including coning oils, conditioners, detergents, dispersants, semi-permanent finishes.

Laurel Synthetic Detergents—A new series of synthetic detergents of the non-ionic type — *Diotrene T* — excellent penetrant and softener; *Superterge L*—efficient penetrant and dispersant—all type colors; *Supergel RS*—effective scour used alone or in combination with alkalies, rapid penetrant and dispersant. All three are unusually good scours, penetrants and dispersants. Stable to alkali, acid and hard water. Highly satisfactory dyeing aid.

Laurel Hosiery Finishes — Natural, synthetic fibers and combinations. Produce desired finish, hand and snag resistance. Water repellents, spotproof, waterproof and resin finishes.

Laureltex #340 Transfer Remover—Quickly and completely removes transfers from hosiery prior to redyeing. Also removes finishing compounds. For all type fibers.

Laurel Mildewproofing Compounds—Prevent mold formation on hosiery. Effective on yarns and piece goods.

Laurel Stainless Knitting Machine Oil — Thoroughly lubricates. Emulsifies rapidly. Washes out in regular scour.

LAUREL SOAP MANUFACTURING CO., Inc.

textile soaps, oils, finishes

ESTABLISHED 1889

Wm. H. Bertolet's Sons

Warehouses... Paterson, N. J.
Chattanooga, Tenn. • Charlotte, N. C.

Offices **...** 2603 East Tioga Street, Philadelphia 34, Pennsylvania

Device Alters Heel Construction

Staff Prepared

EXCLUSIVE

ATTACHMENT for 45-gauge machines equipped with rack-back mechanism permits imitation of "Duo-Flex" type heel made on fine gauge machines. More stylish appearance and better fit claimed.

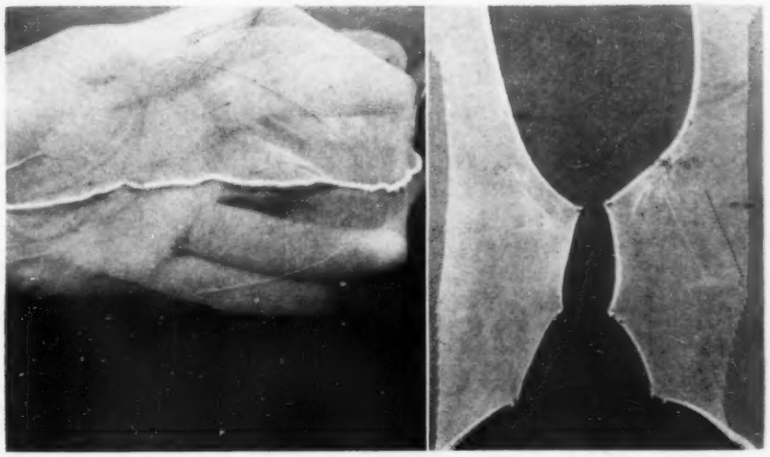
AN ATTACHMENT, for use in simulating the appearance and fit of the "Duo-Flex" type heel made on fine gauge hosiery machines, is currently being used in several full-fashioned hosiery mills. The device is used on 45-gauge Reading machines equipped with rack-back attachments.

The regular narrowing fingers on 45-gauge machines are not as wide as those on finer gauge machines, and the simple attachment was made in the mill shop to permit heel constructions beyond the limits of the standard narrowing fingers.

The new part is bolted onto the narrowing lifter attachment, as shown in the illustrations, and functions to prevent the carrier corker (dog) from racking the carrier ratchet gear. When the carrier corker is made inactive, it is necessary to control the narrowing ratchet so that it will move one tooth (equivalent to one needle) at a time instead of two teeth (or needles) at a time.

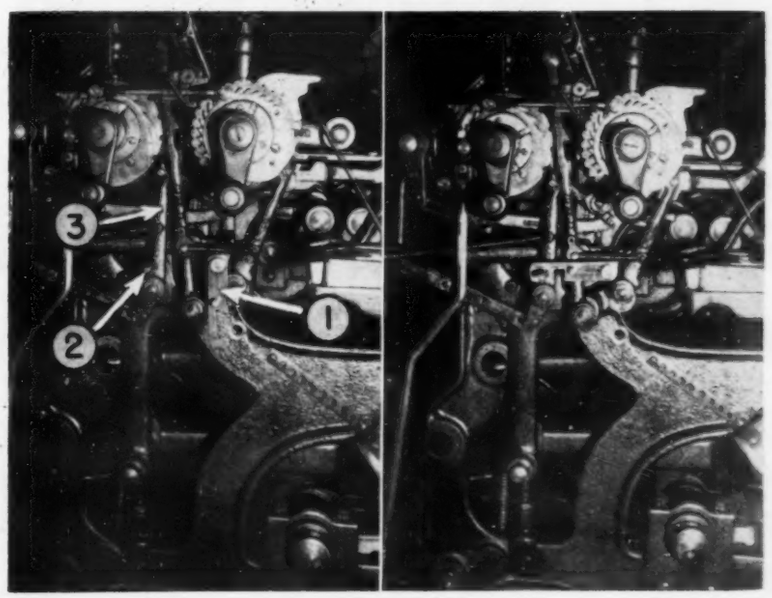
A stud is attached to the carrier corker over which a retainer is placed in position (at the proper time) to control the carrier corker and prevent it from engaging the ratchet teeth. The narrowing corker is then adjusted so it will engage only one ratchet tooth at a time. (See illustrations for details.)

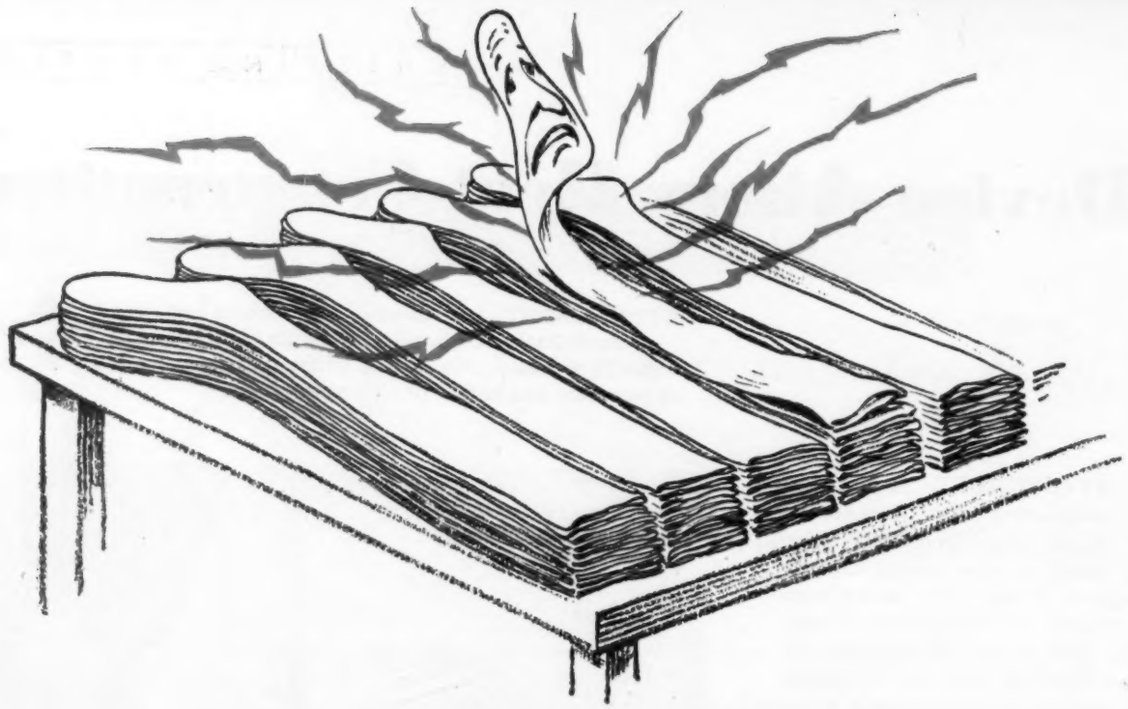
In making the change, care should be taken to see that no other parts of the machine are disturbed or got out of adjustment. A stop motion is set to stop the machine when the required number of courses are knitted in the heel; employing a stop motion is common practice when any change is made on 45-gauge styles or constructions.



Left, a fine gauge stocking with "Duo-Flex" type heel which is said to insure snug fit. Right, two heels of different stockings made on 45-gauge machines. Heel on left is conventional. Heel on right was made on machine equipped with device which simulates the "Duo-Flex" type heel and gives better fit on round heel stockings in addition to giving stylish appearance.

Photo at left shows the device (1) bolted onto the narrowing lifter attachment. Stud (2), on the carrier corker, is held by the retainer (1) to prevent the carrier corker (3) from racking the carrier ratchet gear. Right, the retainer is shown in position to hold the carrier corker inactive.





It keeps the STATIC out of your stockings

Here is the Turbo "quick dry"—60 to 90 seconds in the Turbo Finish Boarder produces static-free stockings, perfectly finished. Makes stockings easy to handle without the cost of special dampening equipment. A turn of a dial gives you just the temperature you want.

Your finest stockings stay smooth and even throughout the finish boarding operation. Fabrics cannot creep because forms remain upright. Air flow is directed from top of form down over leg and welt and returns to fan to be recirculated.

Production is 250 dozen pairs in 8 hours with two boarders.

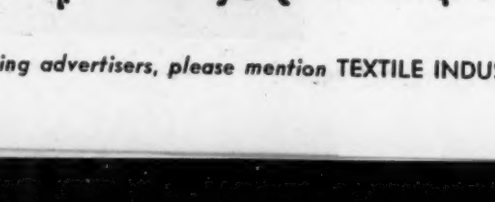
Check these economies of the Turbo Finish Boarder: No service employee is required to straighten piles. You can run four sizes at one time—there are four groups of 12 forms each. Maintenance is negligible. Steam consumption is low.

Get the complete Turbo story. A 20-page book, fully illustrated, is yours for the asking. Write us today.

TURBO MACHINE CO., LANSDALE, PA.

TURBO PREBOARDER
No banging or jolting to injure the fabric or jangle the nerves. Two groups of 18 forms each—you can change 36 forms in 5 minutes. Produces up to 145 dozen pairs in 8-hour day, with one operator. Write for folder.

TURBO
Finish Boarder



KNITTING SECTION

Realistic Planning Urged for 1950

A recognized authority in the hosiery industry contends that with annual potential output of ninety million (90,000,000) dozen pairs of nylon stockings in the offing, the manufacturers are faced with the choice of making stockings only against firm orders or going in for nation-wide promotional advertising on a scale that will keep just enough ahead of this industry's growing production potential.

It is cited that ten years ago, with annual output of only forty-eight million (48,000,000) pairs of stockings, the industry thought itself on the brink of ruin from over-production, and yet next year the yield of nylon stockings may be more than double the output of silk hosiery in 1939.

It is emphasized that a study of other large industries over the past twenty years seems to show that management usually decided to stimulate increased sale of a product rather than to curtail operations, because it was felt the latter course contributed to industrial unemployment and other undesirable chain reactions.

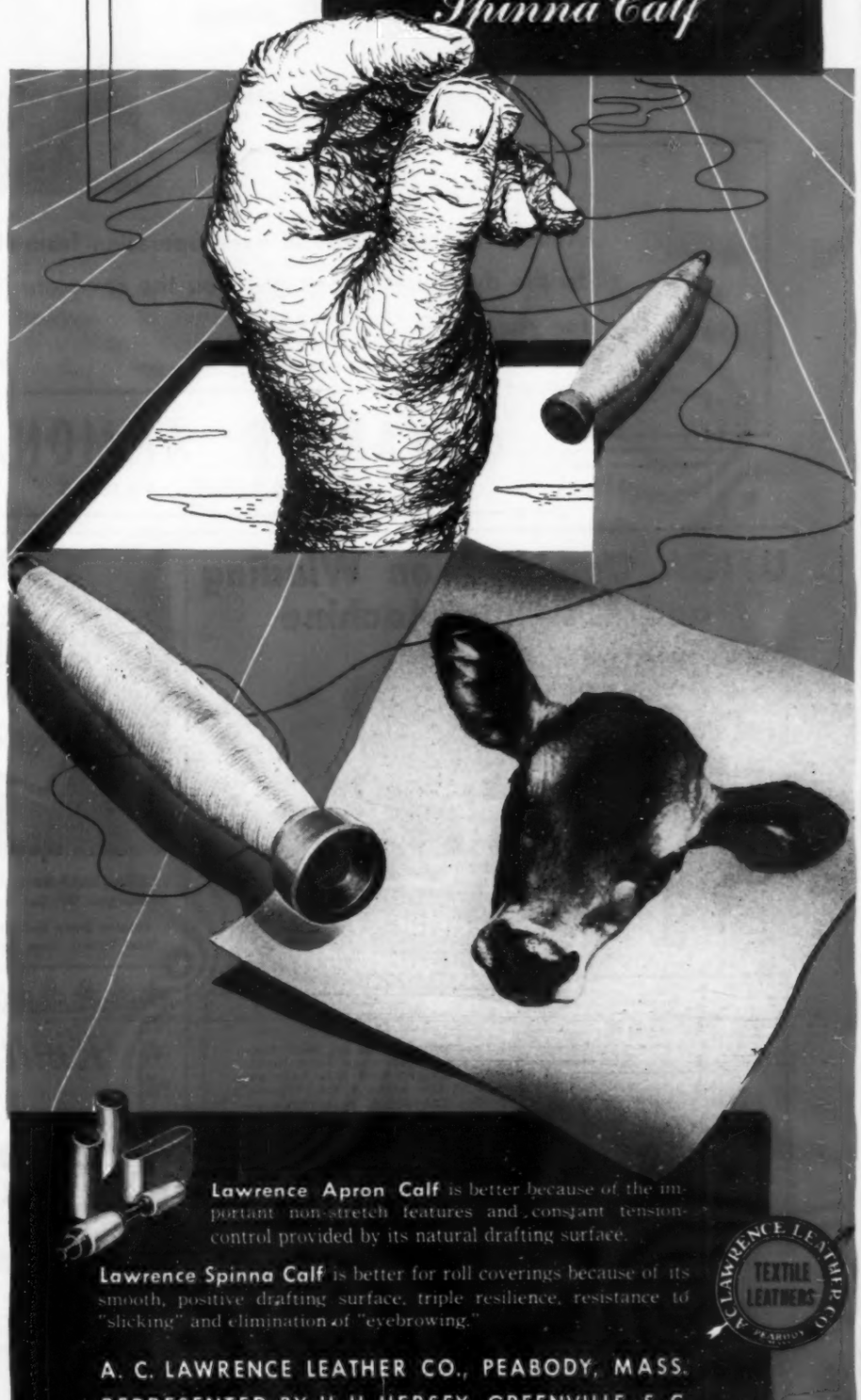
The commentator pointed-up his theme by reciting the achievements of the cigarette manufacturers along this line. Starting about thirty years ago, he related, cigarette sales gained several hundred per cent, mainly because of consistent and forceful advertising on a nation-wide scale. At the start of this campaign to popularize cigarette-smoking, the tobacco people had to overcome a mighty bad press, incited by reformers against rum-and-tobacco; but today nobody ever hears cigarettes spoken of as "coffin nails."

Translating this experience into a hint for hosiery men, this authority goes on to stress that if many millions of women and girls were persuaded to adopt the tobacco habit—unthinkable thirty years ago—then the stocking interests certainly can, by adopting similar advertising themes, "shame bare-legged females into wearing adornment that surely will make them look more attractive."

It Takes
NATURAL CALFSKIN GRAIN
to Spin Top Quality Yarns!

YOU'LL GET BETTER RESULTS WITH:

LAWRENCE
Apron Calf
Spinna Calf



Lawrence Apron Calf is better because of the important non-stretch features and constant tension-control provided by its natural drafting surface.

Lawrence Spinna Calf is better for roll coverings because of its smooth, positive drafting surface, triple resilience, resistance to "slicking" and elimination of "eyebrowing."

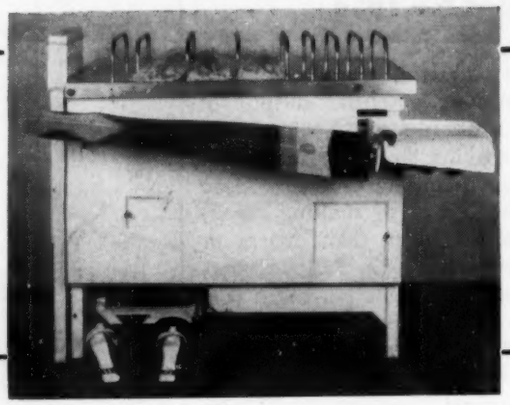
A. C. LAWRENCE LEATHER CO., PEABODY, MASS.
REPRESENTED BY H. H. HERSEY, GREENVILLE, S. C.

LAWRENCE TOP NAME IN ROLL COVERINGS

HOSIERY EXAMINING EQUIPMENT

"Your machine is under-rated... we've found it to be a versatile, profit-producing unit all along the line!"

—QUOTING A CUSTOMER!



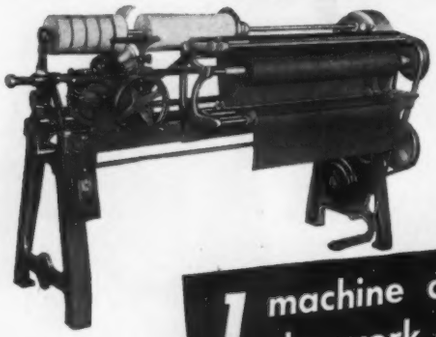
Ammon methods assist in each operation from the knitting machine to the dyehouse! Let us give you the complete information . . . see *for yourself!*

CONTACT

EDWARD R. AMMON, INC.

READING, PENNA.

UTICA Combination Winding and Cutting Machine



1 machine does the work of 2

THIS fast-producer has all the advantages of two machines, but uses the floor space of just one. Cuts light, medium, or heavy weight, both straight and bias fabrics. Cutter and Winder can be run at the same time. Rigidly constructed for long, trouble-free operation. Has measuring scale for cutting accurate rolls. It's safe—knife, grinding wheel, all gears and sprockets are well-guarded. Equipped with Veeder Root yardage counter. Made in 40, 45, and 55 inch width machines. Make your own bindings—as you need them—from the same material as your product—at lower cost. Write today.

UTICA

NOVELTY AND MILL SPECIALTY CO.

DWYER AVE. & PIXLEY ST., UTICA 2, NEW YORK

Builders of Textile Machines Since 1903

- ***Dry Transfers!***
- ***Prestomarks!***
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Wilmington 99, Delaware

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Identification Headquarters since 1903

KAUMAGRAPH

Knitting and Warp Yarn

4's to 30's

AVONDALE MILLS

SYLACAUGA, ALABAMA

SALES REPRESENTATIVES

COMER-AVONDALE MILLS, INC.

Boston — Chattanooga — Chicago — Charlotte
New York — Philadelphia — Reading

Stop Motion for Multiple Pulley Knitting Machines

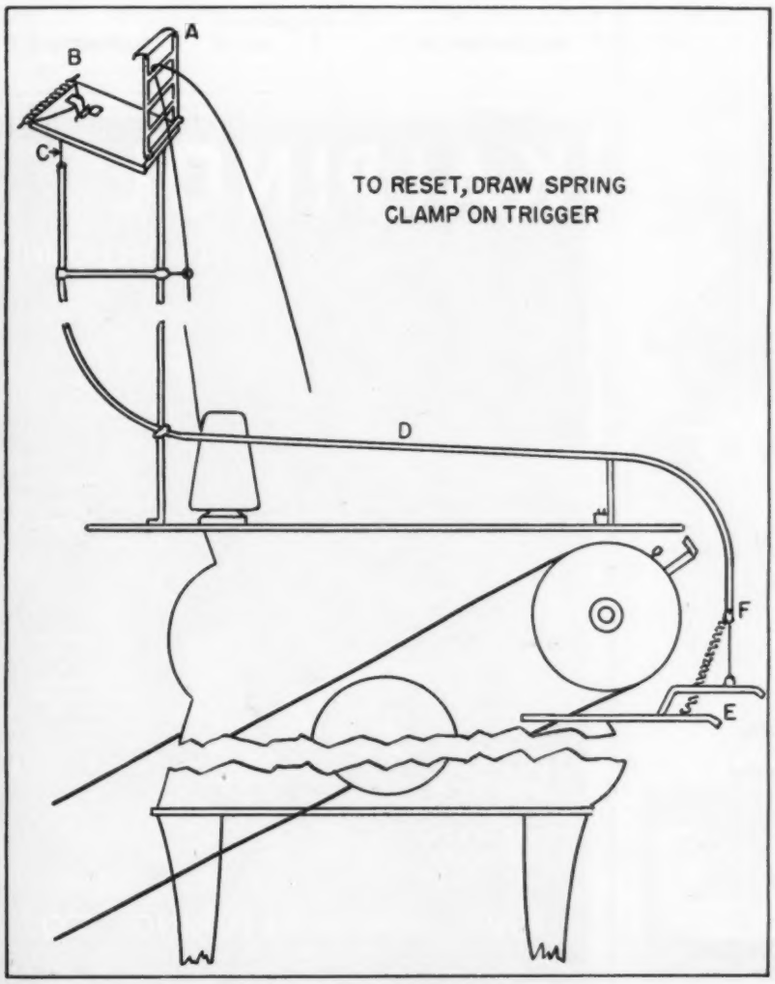
EXCLUSIVE

A SIMPLE stop motion device for use on triple pulley knitting machines, or on double pulley machines having a spring actuated idler, is quick acting and is inexpensive to make. Details of the arrangement are shown in the sketch.

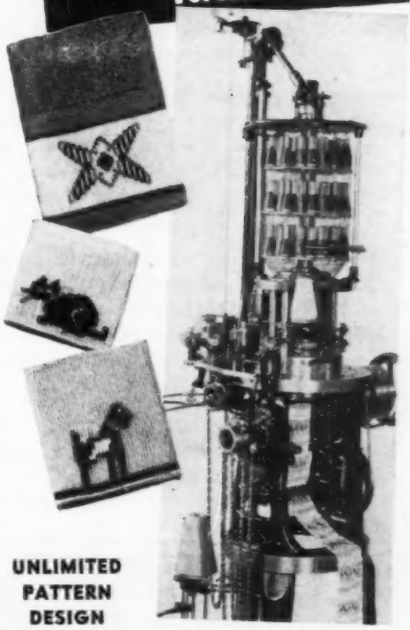
When the yarn breaks, the hinged guide (A) strikes the trigger which holds coil spring (B). The trigger releases coil spring (B) which jerks a length of piano wire (C) through tube (D). This action releases retaining arm (E) from slot on shifting rod (F). The entire operation of the stop motion is for the purpose of moving the shift spring to transfer the driving belt to the idler pulley. It is necessary to reset the stop motion each time the machine stops.

CONTRIBUTOR No. 8199

Right side of machine showing drive pulleys and belt shift assembly.



Now the NEW Improved
FIDELITY
MULTI-DESIGN
RIBBER
Dependable • Time-tested
Versatile



UNLIMITED
PATTERN
DESIGN

WITH 120 Vertical and 5 Horizontal colors, the Fidelity Multi-Design Ribber offers the greatest development in a machine for producing True Ribbed Tops.

The unique 25 step pattern mechanism makes possible an endless number of color designs, limited only by the imagination of the designer . . . yet patterns can be changed with ease in a relatively short time.

Thousands of Fidelity Ribbers have given trouble-free service for over a quarter of a century and the soundness of their basic design is a proven fact.

This dependable, time-tested Ribber now brings to your plant a versatility of design that will mean better production, more sales and the means to meet competition.

For details fill in the coupon and clip it to your letterhead.

Manufacturers of intricate precision machinery
Since 1911.

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3908 Frankford Ave., Philadelphia 24, Pa.
Please send me your illustrated brochure, "The Fidelity Multi-Design Ribber."
*Company*_____
*Address*_____
*Name*_____ *Title*

Memo —

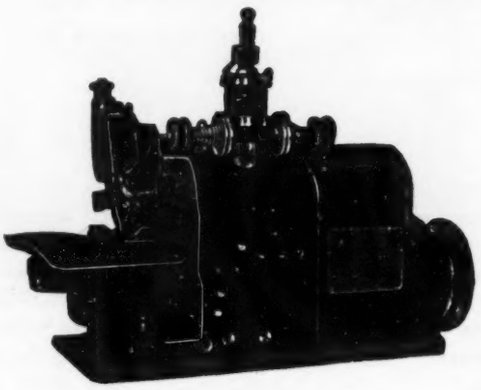
Graton + Knight
Textile Leathers (Haircan)
available in the South thru
Dixie Leather Corporation
Albany, Georgia
Must try them soon —

Established 1838 — **MERROW** — Incorporated 1894

HIGH SPEED OVEREDGING, OVERSEAMING AND HEMMING MACHINES

FOR USE ON

Knitted and Woven Wear of All Kinds



QUALITY RESULTS
HIGH PRODUCTION
CONVENIENT HANDLING
MINIMUM TIME-OUT FOR ADJUSTMENT OR REPAIR
LOW UPKEEP COSTS

For Best Results Use a Machine Suitably Arranged for Your Work

THE MERROW MACHINE COMPANY
2805 LAUREL STREET — HARTFORD 6, CONN., U. S. A.

—Distributors—

HOLLISTER-MORELAND CO., P. O. BOX 721, SPARTANBURG, S. C.

Specify

AMERICAN

For Knitting or Weaving

AMERICAN DURENE*

Highest Quality Mercerized Yarns

*

NATURAL YARNS

Combed Peeler or Sak, 10's—90's Single
Combed Peeler or Sak, 10's—100's Ply

*

Selling Agents for

Efird Manufacturing Company

Knitting Yarns

Combed, 14's—60's — **Carded, 8's—30's**

*

Thread Division · Lawrenceburg, Kentucky

*

W. H. SUTTENFIELD, Vice-President and Sales Manager

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Mr. C. E. Wood	Mr. H. W. Davenport	Mr. Wm. S. Montgomery	Wood & Hutchinson	Mr. M. L. Rhue
Miss E. R. Abernethy	735 Chestnut Street	3701 N. Broad St.	222 W. Adams St.	Room 2906
Mr. T. J. Davis				Empire State Bldg.

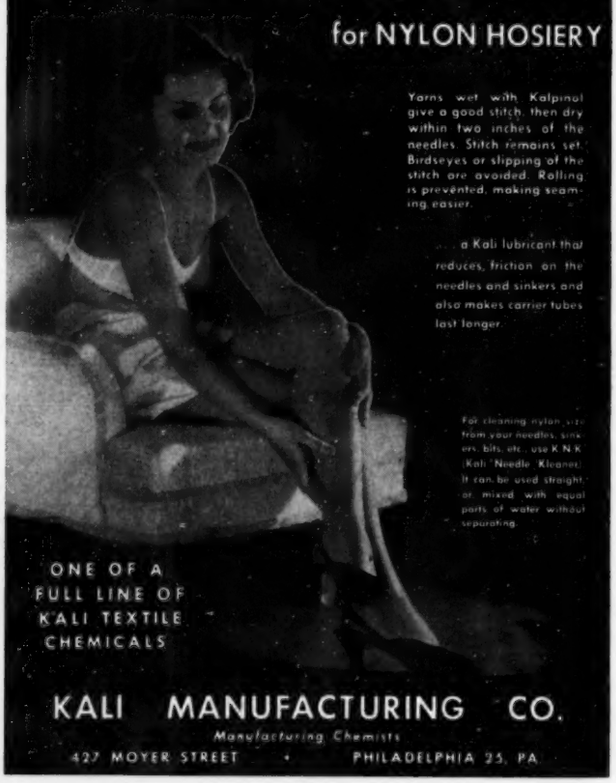
HIGH POINT, N. C., Mr. E. J. Holbrook
GASTONIA, N. C., Mr. T. C. Southerman

American Yarn & Processing Company

Mount Holly North Carolina

KALPINOL

for NYLON HOSIERY



Yarns wet with Kalpinol give a good stitch, then dry within two inches of the needles. Stitch remains set. Birdseyes or slipping of the stitch are avoided. Rolling is prevented, making seaming easier.

... a Kali lubricant that reduces friction on the needles and sinkers and also makes carrier tubes last longer.

For cleaning nylon yarn from your needles, sinkers, bits, etc., use K.N.K. (Kali Needle Kleaner). It can be used straight or mixed with equal parts of water without separating.

ONE OF A FULL LINE OF KALI TEXTILE CHEMICALS

KALI MANUFACTURING CO.

Manufacturing Chemists

427 MOYER STREET · PHILADELPHIA 25, PA.

High Hopes For New Sportswear Season

One of the developments that helped the textile-garment industry to get through some dull spots during spring and summer was the interest shown by the public in sports and vacation goods. This changed the entire outlook for a number of apparel concerns, and therefore the fall and winter outlook for such merchandise is viewed with optimism.

Granting they are right about the expected volume, it remains that individual opinions vary considerably as to which lines or kinds of garments will have the most attraction for consumers. There are high hopes that the public will continue to spend liberally, but until lately a good many stores have thought it wise to remain more or less in an open-to-buy situation.

It appears to be accepted without much question that there will be plenty of merchandise offered in the sportswear field and therefore the competition will be very keen.

AN EYE ON THE KNITTING MILLS

Frank Ix & Sons have purchased the 12 tricot knitting machines comprising the tricot unit of Deering Milliken & Co., Inc., Abbeville, S. C. The first named company has a tricot knitting mill at Charlottesville, Va.

Vanity Fair Mills, Inc., Reading, Pa., women's full-fashioned hosiery, rayon underwear, etc., is reported planning an addition to the mill in Jackson, Ala., for a considerable increase in capacity.

Holeproof Hosiery Co., Milwaukee, Wis., has purchased the machinery and facilities of Compton Mills Corp., Los Angeles, Calif., and will use this for increased production.

Asheville (N.C.) Hosiery Co., women's full-fashioned rayon hosiery, has work in progress on the installation of additional knitting machines.

Hudson Hosiery Co., Charlotte, N. C., has work nearing completion on a one-story mill unit at Oakhurst, N. C., and the installation of a number of 60-gauge full-fashioned knitting machines will begin soon.

Angelica Hosiery Mills, Inc., recently organized, has been reported as planning the early operation of a mill in Angelica, Pa., for the manufacture of hosiery and other knit goods.

Hunter Hosiery, Inc., "guaranteed streak free" nylon hosiery is a new concern in Laconia, N. H. Carlton S. Redmond, Jr., is president, treasurer and principal incorporator.

Kay Hosiery Mills, Inc., Kutztown, Pa., has been organized recently. The principle incorporators are Joseph B. Kay, Caroline Wells, and Sylvia Hassenfeld.

Acme Products

for seamless hosiery knitting

Speak for Themselves

Up-To-Date Machines

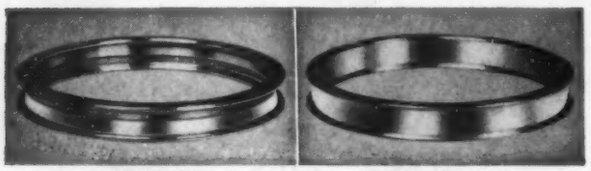
Needles

Economy Makers

ACME KNITTING MACHINE & NEEDLE CO.

FRANKLIN, N. H.

One section of our modern ring manufacturing establishment. Every operation is in the hands of men who know rings and the importance of perfect finish.



ANGLE WEB **STRAIGHT WEB**

Whether you prefer angle or straight web rings, we have them, and the Ragan Aero Finish assures you of super-performance from every one we ship.

As our customers know, our deliveries have been slow in the past, due to production bottlenecks. We have never been willing to sacrifice quality for speed.

Now we are in our new, modern plant, with four times the production space—and we can promise you quick action when you order Ragan Rings.

The exclusive Aero Finish on Ragan Rings assures better "take-off" and a shorter breaking in period. So your frames stay in production with fewer interruptions for ring changes.

It pays to replace with Ragan Rings . . . rings of the future, now . . . to fit every spinning and twisting need.

REPRESENTATIVES

JOHN FOARD, P. O. Box 574, Newton, North Carolina. Covering the Carolinas and Virginia.

ARTHUR W. HARRIS, P. O. Box 1982, Atlanta 1, Ga. and IRWIN F. WALL, covering entire South except Carolinas-Virginia.

Ragan Ring Company

901 South Main Street, East Point, Georgia

Mail to P. O. Box 174, Station A, Atlanta. Phone CAlhoun 4642

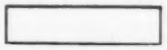
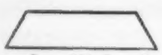
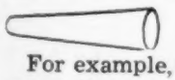
Novel Fabric Called "Conical Cloth"

This item was submitted in a kink contest.

EDITOR TEXTILE INDUSTRIES:

The name "Conical Cloth" was given to a type of cloth that forms a cone shape when its ends are joined together. This cloth can be prepared in any warp and filling counts with suitable pick and reed.

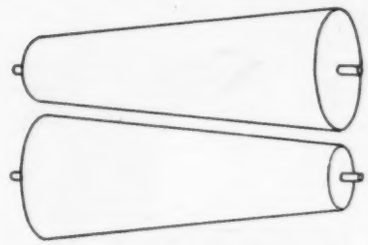
The idea or reason for preparing this type of cloth is to reduce waste in making garments. Some uses of the conical cloth are as follows: (1) dhoti, (2) sari, (3) Pathani Surwal, (4) ladies' petticoats, (5) lower half of frocks, etc.

The foregoing articles of clothing are usually prepared from cloth made in  shape, but the amount of cloth used for the garments can be reduced by using conical cloth of  shape because one end will be longer than the other and when joined will form a  shape.

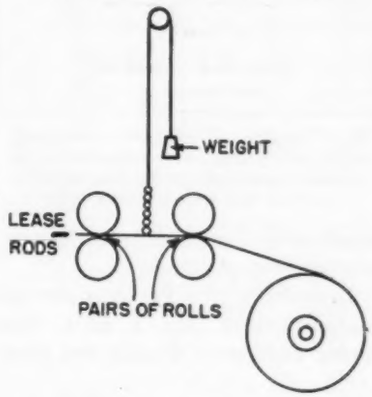
For example, a dhoti made from conventional shaped cloth would take a piece of fabric five yards long and 52 inches wide. A dhoti made from conical cloth would require a piece of fabric measuring 3 yards at the top selvage, 5 yards at the bottom selvage, and 52 inches wide. By this means a piece of cloth of triangular shape 2 yards by 52 inches wide is saved.

Practically, only the warp yarn is saved while the weft is used as in plain cloth. The top half of the cloth is made into a compact fabric due to the high pick rate. The lower half will be the same as in plain cloth.

A special creel of warp bobbins is required for this cloth which is woven on cone rolls. Goods can be woven with the following changes on the existing loom. The take-up motion remains the same but the take-up rolls should be changed to two conical rolls made in accordance with the cloth to be made (ratio of top to bottom selvage). The rolls are arranged one on top of the other.



Conical take up rolls are used. Below, showing tension weights.



The lap roll will wind the cloth in the usual way. The cone shaped roll and the lap roll exert pressure to keep the cloth in contact with both to prevent slackness during winding.

A friction let-off motion can be used, but a positive let off motion similar to those used on silk looms is preferred for this type of cloth.

Between the lease rods and the warp beam there are two pairs of rolls which are operated by friction of the warp tension. Between these pairs of rolls weights are applied to take up the surplus length of yarn. Weights are attached to apply tension to a rod which is located under the warp yarn. The weights are attached by small springs and a piece of string at each end.

The weights function to main-

YOUR IDEA MAY BE WORTH MONEY

$$ WIN $100 $$

This contest ends November 15, 1949. Another contest will start upon conclusion of this one.

ONE HUNDRED DOLLARS will be awarded for the most helpful short cut, kink, time-saving device, cost-cutting suggestion, or quality improvement idea submitted by November 15.

The contest is open to any reader of this magazine. Contributions eligible for the prize must not have appeared elsewhere.

All material will be paid for at regular space rates upon acceptance irrespective of the contest winner. Advise when submitting entry if participant's name may be used. Only one award will be made in each contest.

Participants are not restricted as to number of items submitted to compete in the contest. Each entry should be described in sufficient detail to make it easily understood, and where possible, glossy photographs or pencil sketches should be included. Finished drawings are not necessary.

All entries for this contest must be postmarked not later than midnight November 15, 1949. Address: Editor "Textile Industries," 806 Peachtree Street, N. E., Atlanta 5, Georgia.

tain tension on the slack yarn, and the strings are passed through a hook or rod at a height depending on the length of the piece being made.

A small cover should be placed over the warp to prevent the weights from breaking out the ends. All other parts of the loom operate in the usual manner.

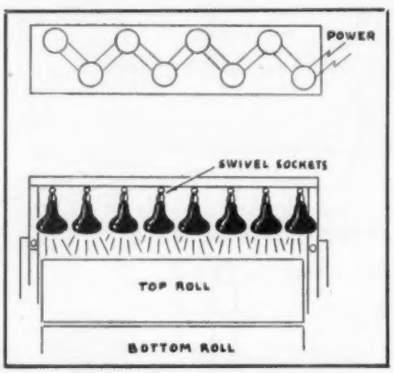
D. D. P. (*India*)

Preheating Peralta Rolls Eliminates Lap-Ups

EDITOR TEXTILE INDUSTRIES:

Infra-red heating of Peralta rolls on our wool cards has effectively improved the quality of web delivered from the crushers. Formerly, difficulty was experienced with Peralta rolls in starting up the card room after a week end shut down. The fine web being delivered from the Peralta machine would tend to wrap around the rolls causing breaks, splits, and lap-ups which would decrease card production.

Suspecting that the rolls, which are normally warm during operation due to the excessive pressures involved in burr crushing, need a pre-heating on Mondays to stabilize at operating temperature, a bank of infra-red drying lamps was installed on each Peralta machine as indicated in the accompanying sketches.



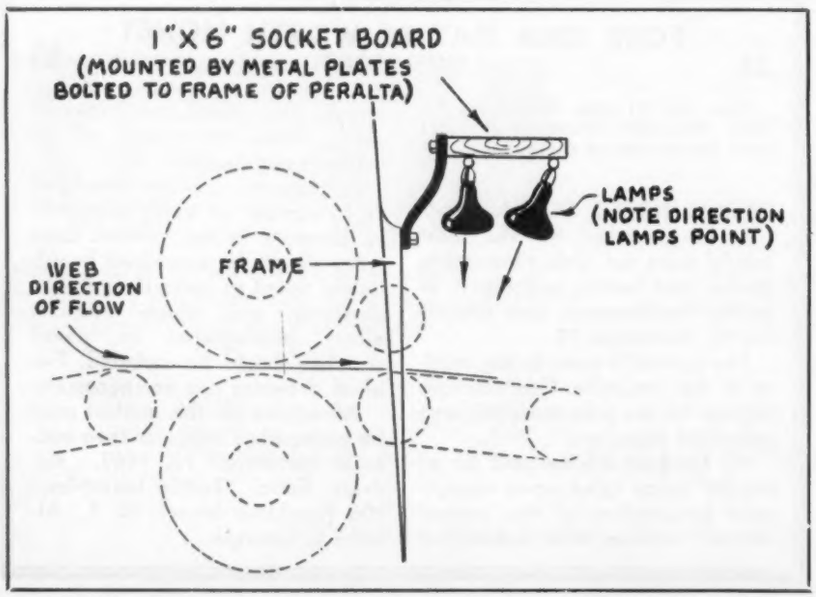
The fixture is wired in parallel, and the lamps are adjustable to obtain maximum radiation at juncture of top and bottom rolls.

In practice, the Peraltas are run without stock for a half hour under the lamps during the Monday morning start-up period with the result that lapping of the webs has been eliminated.

As soon as the rolls are heated, the lamps are removed from the lighting fixtures to prevent breakage.

CONTRIBUTOR No. 8182

Diagram showing location of lamp bracket and method of attaching fixture to Peralta machine. The Peraltas are run without stock for fixture to Peralta machine.



Narrow Fabric Mill Uses Scotch Tape

EDITOR TEXTILE INDUSTRIES:

Scotch tape is a major item at our narrow goods elastic web manufacturing plant. The tape is used to join ends of web in putting-up rolls, being wrapped around a butted splice. This method of fastening lengths replaces pinning and stapling which customers balked at because of the incipient danger to operators engaged in further processing.

We also use tape to insulate unused segments of drop-wire stop motion bars on creels. In this way, excess drops are kept from coming into contact with the electrically charged bar, thereby eliminating the need of removing these drops when a style is changed on the creel. The "working" drops function normally on the unshielded portion of the bar for detecting ends down.

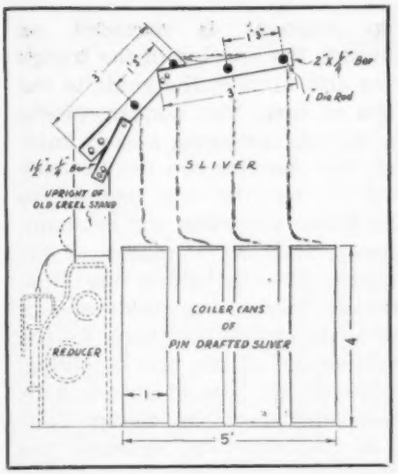
CONTRIBUTOR No. 8176

Improvised Reducer Creel Accommodates Cans

EDITOR TEXTILE INDUSTRIES:

Feeding Warner & Swasey pin drafted worsted sliver directly from coiler cans to the reducer frame can be done without expensive conversions. First stage reducers may be modified along the general lines of the feed arrangement for cotton system slubbers.

Gill spool creels on the reducers are removed and replaced with sliver guide rods bracketed to the creel stand uprights as shown in the accompanying sketch. Rods are arranged to permit stacking four rows of coiler cans at the back of a reducer. Constructed of 2 x ¼ inch bars and 1 inch



diameter rods, guides can easily be assembled within the mill.

CONTRIBUTOR No. 8183

Salvaging Cop Filling Waste

MANY MILLS, engaged in the manufacture of decorative and novelty fabrics, use pick-and-pick (4x4) box looms. On such looms the weaver frequently uses cop filling, which is changed in the shuttles by hand. The fabrics made on these looms include drapery, upholstery, heavy suitings, etc.

The cost of waste when changing shuttles on the aforementioned type of goods can amount to a considerable expense. On the other hand, if the weavers are urged to run the cops as long as possible, it is likely that there will be an excessive number of filling run-outs, broken picks, pick-outs, and other difficulties. These difficulties not only increase the percentage of seconds, but also result in much lower production.

One mill has minimized the problem by improvising a machine to salvage the cop filling waste. One spindle of a cone-and-tube winder is powered by a small individual electric motor, which was set at a convenient height. A V-shaped trough, about three inches deep, was erected beneath the winder and accommodates the material to be salvaged. In the trough, directly beneath the thread guide, a wooden ring two

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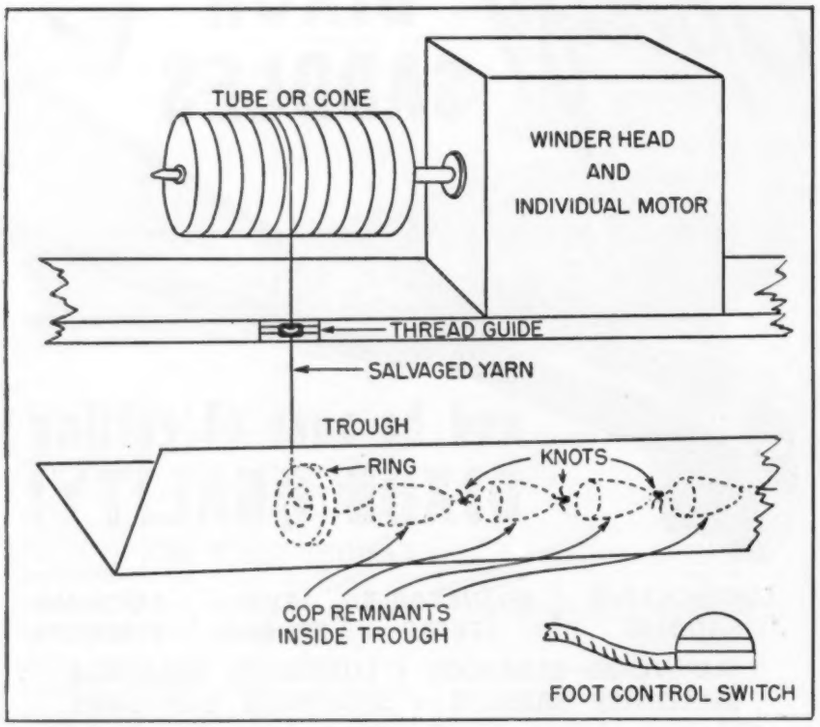


inches in diameter was installed. The wooden ring has a half-inch hole in the center.

A foot switch control, for starting and stopping the spindle, was installed on the floor. A front view of the improvised arrangement is shown in the accompanying sketch. The winder spindle was slowed down to an appropriate speed, which was determined by experiment. The weavers were instructed not to exhaust the filling cops, and to place the remnants carefully in the receptacle.

The operator sits directly in front of the spindle and keeps one foot on the control switch. One cop remnant is threaded up through the opening in the trough ring and through the guide to the tube or cone. The winder spindle is started, and using a sand knotter, the operator can tie the back end of the first cop remnant to the front of another cop remnant. The second cop is placed in the trough directly behind the first, and by joining the inside end of each succeeding remnant to the outside end of the one adjoining, a continuous flow of yarn can be maintained from the trough.

By the time the operator has filled the trough with threaded-up remnants, the first few will have run out. All of the cops in the trough are then pushed up to the ring, and the operation is continued. The hand knotter is useful (although not essential) in tying the ends together, and it does not interfere with the operatives' efforts to untangle the yarn.

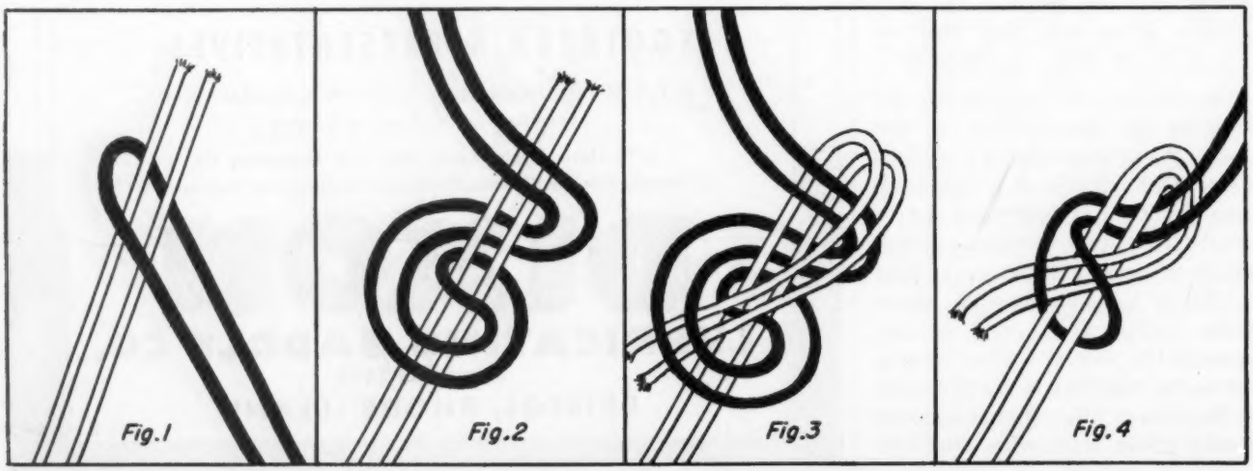
The value of the yarn, salvaged on this machine, far exceeds the price it would bring if sold as waste. This is especially true where expensive novelty yarns are used. The salvaged yarn may contain a large number of knots; however, there are many fabric styles for which this type of yarn can be adapted.

Any fancy fabric mill, faced with a filling waste problem, may find the foregoing solution helpful.

WEAVER'S KNOT FOR TYING PLY OR SELVAGE ENDS

The weaver's knot can be used to tie a flat knot in double selvage ends or ply yarn. Fig. 1 shows the tie end held near the middle and looped around the warp ends. The tie end is then passed around the warp end as shown in Fig. 2, and in Fig. 3, the warp ends are doubled back through the loop thus formed. The completed knot assumes the shape shown in Fig. 4 and when drawn tight will pass through almost any reed as easily as a knot tied in single yarn.

CONTRIBUTOR No. 8193



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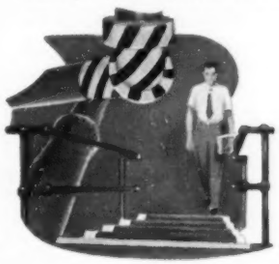

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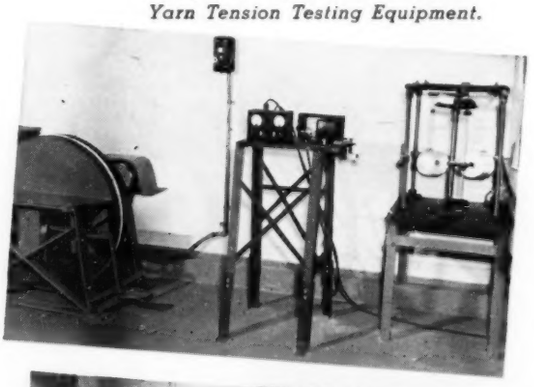
Above—View of Engineering and Development Department and below Yarn Tension Testing Equipment.



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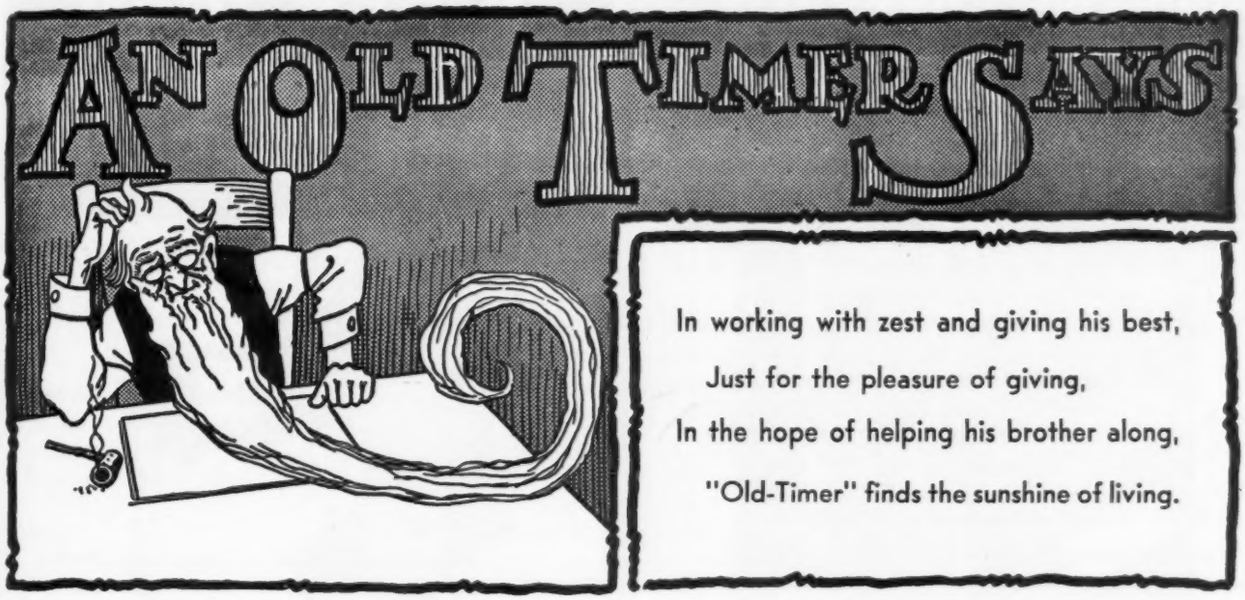
AN OLD TIMER SAYS
In working with zest and giving his best,
Just for the pleasure of giving,
In the hope of helping his brother along,
"Old-Timer" finds the sunshine of living.

Random Thoughts

Vagaries?

JUST WHY so many operating executives never seem to take into consideration the *many vagaries* of human nature in their management is rather difficult to understand. The very fact that they hold positions as overseers, superintendents, and managers certainly stamps them as intelligent men. Yet some of the policies operating executives use can almost put them in an entirely different category.

Remember, gentlemen, a large majority of people can almost be driven by a far superior force, while practically as many people can be tricked by men who are just smart in cajolery, but put this fact in your pipe and smoke it—yes, smoke and smoke until it is firmly fixed in your mind—*people as a whole will follow only when they are intelligently led.*

To lead people, you must convince them by leadership (management) which appeals to their fairness and to their common sense, faculties they have to a larger extent than most operating executives seem to realize.

Another vagary of human nature is that operatives as a whole do not appreciate things which are given them. Now that is a pretty radical statement. We only wish space would permit us to give you numerous illustrations to prove that statement.

A late textile mill president pioneered in giving his workers free this and free that, thinking he could build up loyalty by giving operatives more than other mills gave. Years later he was a flustrated man and said that it was almost inconceivable that even giving each family a turkey at Christmas created more dissension than appreciation.

On the other hand, if you arrange *opportunities* for operatives to *participate* in something which touches their pocket books—then you get results. That is the basic foundation, if you please, upon which OLD-TIMER is advising mill presidents to give operatives the opportunity to invest in "Incentive Preferred" stock of their firm. Textile executives who know how to take advantage of the vagaries of human nature are going to be well paid, yes handsomely paid, for their foresightedness.

Arguments

A GREAT many people say that if you disagree with a person you should be frank and honest by telling him so.

Well now, that sounds okeh at first thought, but OLD-TIMER has never used that method when he was trying to win an important argument, say for example, a complaint in regard to some working condition or rule which the management had found necessary to enforce.

We would always listen without any interruption to the person making the complaint, then start our argument in a pleasant mood by saying: "Mr. Employee, you have explained your point very well indeed and we may agree with you on some phases of your com-

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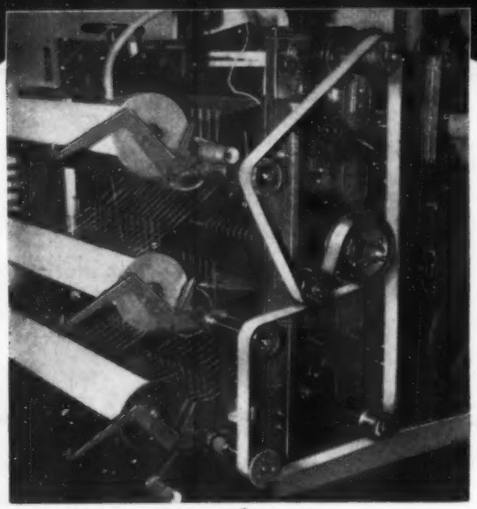

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plaint, but are you sure you have considered. . . . ?" Then follow quietly but earnestly with your ideas. It usually works, gentlemen.

The Future of Personnel Work?

(*Continued from page* 89)

days. You even hear it said by some superintendents that absenteeism disappears when employees are in debt, but both thoughts are no solution to organizational efficiency. However, even if improved attendance is in itself no answer, it does point to the fact that proper use of various incentives may serve as a more effective stimulant in bad times than in good.

Methods improvements are obviously more necessary when the going gets tough, and here, too, the personnel department can render aid in putting across the changes to employees. Some companies have even experienced less production per man per hour when an organization goes below four days a week. When conditions are uncertain, morale drops, with consequent effects on production. Personnel can work effectively on morale problems, likewise.

The Future of Personnel Administration. A sketchy discussion of selection, training, safety, employee relations, public relations, and organizational efficiency would indicate that personnel administration can contribute materially to an organization in a highly competitive market. These are only some of many fields in which personnel can assist. The main points sought here are an emphasis on continuity, long range considerations, and growth. Personnel administrators and their functions are not expendable.

It is indeed trite to say that business cannot get along without people—it is almost as trite to say that progressive organizations cannot get along without efficient personnel, and that the need for efficiency is greater today than ever before. Those companies with farsighted personnel practices should be in the best position to weather any business squall.

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XYNO RESIN AA40 is a water-thin dispersion of moderate particle size, of especial interest to ribbon manufacturers. Many interesting effects in crispness of cotton, rayon, nylon and acetate piece goods may be obtained by combining Xyno Resin AA40 with Onyx NCF Paste or Liquid Resin SS.

Onyx Technical Bulletin TX-2 covers not only the Xyno Resin Dispersions but the two Onyx Resins, NCF Paste and Liquid Resin SS. Write for a copy.

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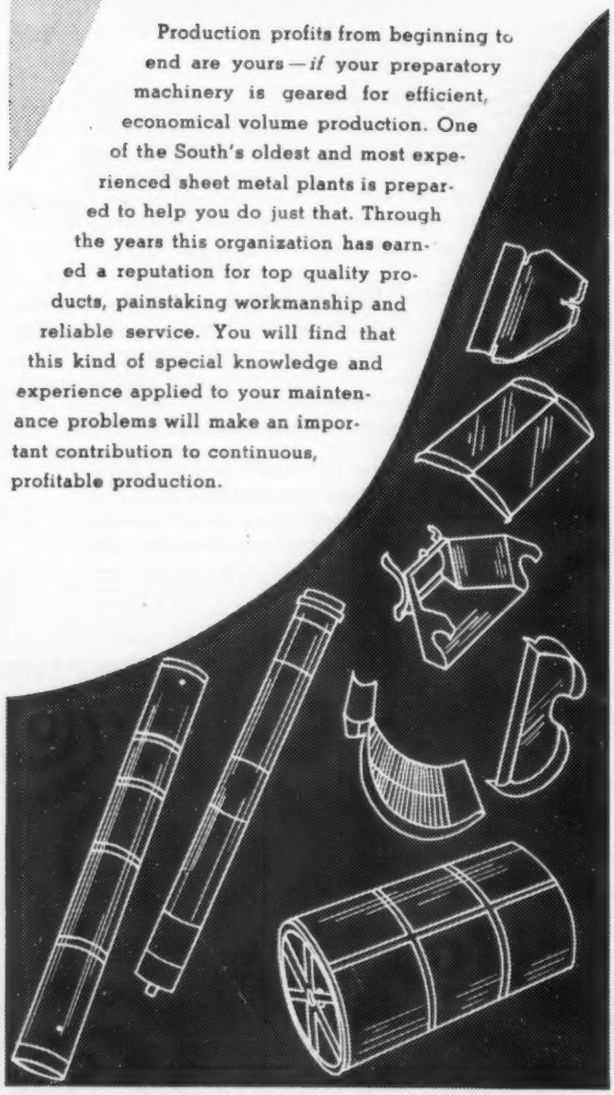

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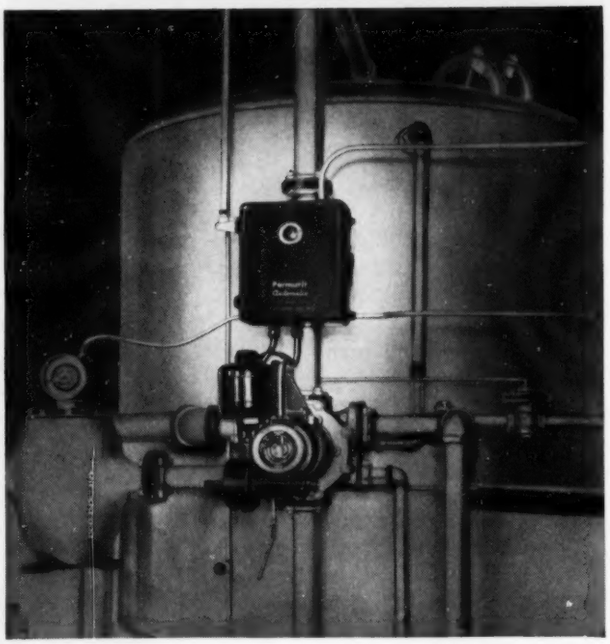

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PERSONAL NOTES

ABOUT MEN YOU KNOW

S. O. Garcia has announced his retirement as vice-president of Elmira (N. Y.) Knitting Mills.

Dr. Jack Compton, formerly at the Rome, Ga., plant of the Celanese Corp. of America, has been appointed head of the chemistry division of the Institute of Textile Technology, Charlottesville, Va.

The American Textile Co., Inc., Pawtucket, R. I., has announced the election of **Martin H. Gurley, Jr.,** as research director. Mr. Gurley was formerly in charge of textile and paper research and development at the Esselen Research Corp., Boston, Mass.

John D. Siewers, former plant manager, has been made general manager of the Washington Mills Co., Fries, Va. He succeeds **John Thorp,** who has retired as president and general manager after more than 48 years of service.

Textron Incorporated has announced the resignation of **Frederick A. Celler** as executive vice-president of Textron Puerto Rico. **James M. Flack,** former industrial relations director of Textron Inc., will replace Mr. Celler. His headquarters will be in Ponce, Puerto Rico.

Henry Rawson, former divisional superintendent of Rock Hill (S. C.) Printing & Finishing Co., has acquired the newly-created post of superintendent of printing at Uncas Printing & Finishing Co., Mechanicsville, Conn.

J. G. Shedd, former manager of the Ottaray plant of Monarch Mills, Union, S. C., has been named general manager of Lane Cotton Mills Co., New Orleans, La.

Gordon Dibble, formerly associated with Mutual Life Insurance Co., has been appointed director of marketing of the men's hosiery division of Holeproof Hosiery Co., Milwaukee, Wis. Mr. Dibble's headquarters will be in Marietta, Ga. He succeeds **Charles Holck** who is now assistant to the general sales manager.

L. M. Boulware, former assistant manager, has been made manager of the United States Rubber Company's Fisk Cord Mills, New Bedford, Mass. He replaces **F. L. Burns** who has retired.

J. T. Crawford, former manager of the three Republic Cotton Mills at Great Falls, S. C., has been elected research director of carding and spinning for J. P. Stevens and Co., Inc.

Dan River Mills, Inc., Danville, Va., has announced the following executive staff changes: **Basil D. Browder,** vice-president, has taken over the general direction of grey goods production, in addition to his duties of directing the finishing operations; **Raymond E. Henderson,** former manager of the Schoolfield division, has been appointed to the post of manager of the grey mills; **L. K. Fitzgerald,** former manager of the Riverside division, has been chosen to fill the newly created position of manager of finishing and development; **Julian B. Cumming** is the new divisional superintendent at Schoolfield, and **R. M. Stephens** is at Riverside in a similar capacity.

Walter Dillard, former assistant to the president of Monument Mills, Housatonic, Mass., has become vice-president of Comal Hosiery Mills, Inc., New Braunfels, Tex.

Carl C. Mattmann, formerly with Textron Incorporated, has joined Stonecutter Mills Corp., Spindale, N. C., as director of fabric development.

John Latham, former plant superintendent of Seminole Mills, Clearwater, S. C., has become superintendent of the Aragon (Ga.) Mills of A. D. Juilliard & Co., Inc. **W. M. Harris** has been transferred from the Floyd Mills, Rome, Ga., to the Aragon Mills, where he has been made controller. **C. A. Townes,** agent and buyer, and **H. F. Neal,** superintendent, have tendered their resignations with Aragon Mills.

C. E. Howlett, former sales engi-

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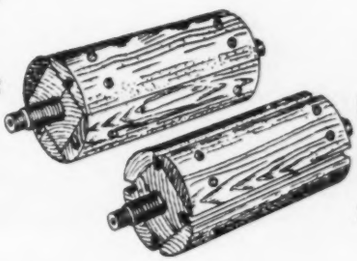
Winder Take-up Rollers

All Sizes of Cloth Rolls



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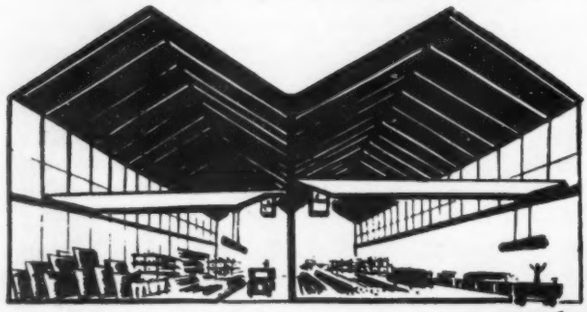
STEEL



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Steelmakers since 1901

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STEEL PRODUCTS FOR YOUR NEEDS

The Warehouse Division was established to serve the Southeast with ferrous and non-ferrous warehouse products. Atlantic Steel Company's 48-year experience, making steel from our open hearth furnaces to finished items of many types, stands behind the Division in its efforts to provide metal commodities and distribute them fairly and equitably.

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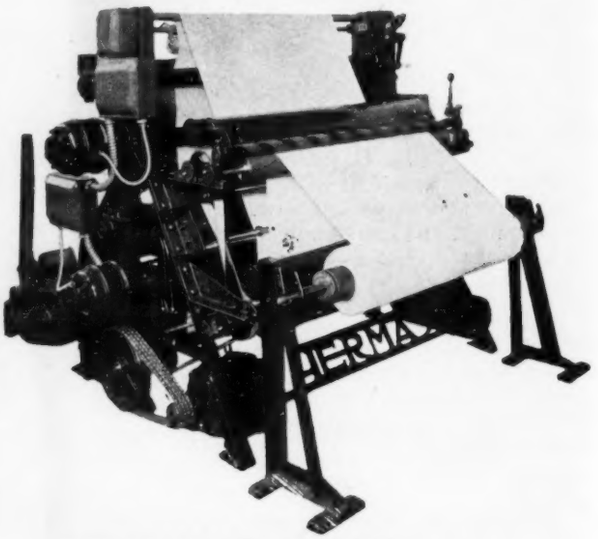
One Typical Mill Saved $1903.40 the First Year

—in its clothroom operation after replacing outmoded machines with modern Hermas Clothroom Equipment.
Let us study your needs and make recommendations for future clothroom development to meet them.



HERMAS AV SHEAR

removes all hanging threads from both sides and selvages of cloth in a single run through, at sustained speeds up to 120 yards a minute.

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includes Sewing and Rolling Machines, Sewing and Feeding Machines, Scrays, Measuring and Examining Machines, etc., of various types.

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America's Only Specialists in Clothroom Equipment

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REPRESENTATIVES

Carolina Specialty Company, Charlotte, N. C.
Ross Whitehead & Co., Limited, Toronto and Montreal, Canada
Unisel, Ltd., Manchester, England
Robert H. Kelley, 84 Union Street, Milford, N. H.
EXPORT DIVISION: Francis H. Love and Son, 57 William St. New York City
Robert R. Simpson, 498—12th Avenue, Paterson, N. J.

neer for A. B. Segur & Co., has joined Pepperell Mfg. Co., Boston, Mass., in an engineering capacity.

George L. Wood, former overseer of finishing at Goodall-Sanford Mills, Sanford, Maine, has become boss finisher of the Franklin (N.H.) Mills of M. T. Stevens & Co.

Walter Lemmon, formerly with the Riverdale Glove Co., has been appointed boss dyer at the Hillsboro (N.H.) Woolen Mills.

Lawrence Hodgeson, formerly associated with the Kenosha (Wis.) Full-Fashioned Mills, has joined Guild-Northland Mills, Laconia, N. H., as boss weaver.

John Bigelow, former industrial relations manager of Amoskeag Mills, Amoskeag-Lawrence Mills, and Amory Worsted Mills in Manchester, N. H., has been placed in a similar capacity by Arms Textile Mfg. Co., Manchester, N. H.

Herbert H. Neuman has been elevated from superintendent to general manager of Amoskeag Fabrics, Inc., Manchester, N. H.

J. P. Barker, formerly with the Lincoln Mills, Pascoag, R. I., has become assistant superintendent of the M. T. Stevens & Sons plant in North Andover, Mass.

W. K. Brooks, formerly with the American Woolen Co., has succeeded **Otto Ruhlin,** retired as boss finisher of the Guilford (Maine) Woolen Mills.

H. Richard Holt, formerly associated with the May-McEwen-Kaiser Company, Burlington, N. C., has accepted a position with the newly-created organization of Frissell Fabrics, Inc.

A. P. Richie has announced his resignation as superintendent of the Dixon plant of American Yarn and Processing Co. in Gastonia, N. C.

M. K. Thackston, purchasing agent for Deering Milliken mills in Spartanburg, S. C., has tendered his resignation. His successor is **Hal Byrd,** formerly in the industrial engineering department.

Winthrop Whipple, former superintendent of maintenance, has been given the superintendency of the entire Jackson Mills operations of Textron Inc.

William E. Reid has been elected vice-president of Riegel Textile Corporation, and will continue as assistant sales manager.

Obituaries

T. L. B. Lyster, 70, former chief engineer of the Hooker Electrochemical Co., Niagara Falls, N. Y., passed away on August 18.

A. Lynn Ivey, 65, president of the Virginia-Carolina Chemical Corp., Richmond, Va., died suddenly of a heart attack last August.

Hugh Nelson Dyer, 75, president of Martinsville (Va.) Cotton Mills, passed away August 26.

Francis S. Nettleton, 69, former general superintendent of the Hockanum Mills of M. T. Stevens & Co., Inc., died last August in Madison, Conn.

Charles B. Sessoms, Jr., secretary-treasurer of Mansfield Mills, Lumberton, N. C., passed away on August 16, having suffered a cerebral hemorrhage a week before.

Arthur C. Freeman, Sr., 83, president of Exeter (N.H.) Manufacturing Co., died last August following a long illness.

Francis H. Eldridge, 44, president of F. C. Huyck & Sons, Albany, N. Y., died of a heart attack on August 3rd.

Dr. J. J. Polak, 65, assistant to the technical vice-president of American Enka Corp., died in a hospital in Asheville, N. C., recently.

William Deacon, Jr., 65, vice-president of W. S. Libbey Co., Lewiston, Me., passed away last August.

Jean N. Guerin, 69, president, general manager, and treasurer of the Belmont Woolen Yarn Mills, Inc., Woonsocket, R. I., died on August 18.

Michael Gordon, 48, hosiery manufacturer and exporter, died August 2 of a heart attack.

Henry C. Hamilton, secretary of Crown Cotton Mills, Dalton, Ga., passed away on August 29.

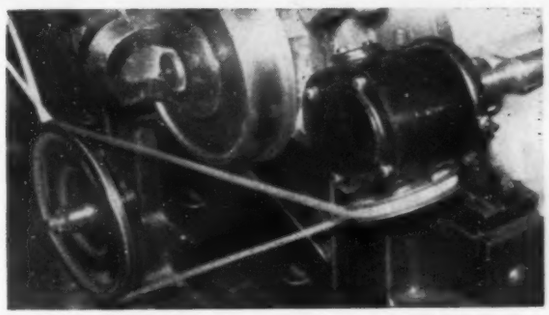
C. S. Makepeace, 56, mill engineer for the Lonsdale Co., died suddenly on August 29 while at the Jane Brown Hospital in Providence, R. I.

Everett H. Fuller, general superintendent of the Hampton Print Works Division of Aspinook Corp., Easthampton, Mass., passed away last August.

T. W. Johnson, 63, night superintendent, Scottdale (Ga.) Mills, died recently.

ANNOUNCING!

the PITTMAN WOBBLE-TYPE COMB-BOX



- Exclusive "Floating Action" feature eliminates shock
- Eliminates oil and messy conditions. Savings up to $12.00 per box per year in oil alone.
- Completely universal! RH or LH installation on *any* make card. Runs in either direction.
- Neat and simple in design—highly accurate.

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McDonough, Ga.

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Since 1875 Diamond Hard has been the recognized standard for textile flooring.

You well know the value of buying the right kind of flooring to withstand punishment for many years, so accept this suggestion . . . when you are in need of new or replacement flooring, write to us for a list of nearby mills you can check for their satisfaction with Diamond Hard.

We would like very much to add you to a long list of customers well pleased with our Quality Flooring and Prompt Service.

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High Point, N. C.

BATSON COOK CO.
West Point, Ga.

WHAT THE

TEXTILE MILLS

ARE DOING

Russell Manufacturing Co., Middletown, Conn., has plans for the opening of a branch plant in Bennettsville, S. C., around January 1, 1950. The new plant will provide facilities for production of new products and for expansion in the present lines.

An office building in Greensboro, N. C. for Carter Fabrics has been planned by **J. P. Stevens & Co., Inc.**

Father George Cotton Mills, Sanford, N. C., has made arrangements for the gradual replacement of looms for others of the same model but a wider cloth.

The new plant of **Bachmann Uxbridge Worsted Corp.** began operations recently in Talladega, Ala.

Visking Corp., Chicago, Ill., cellulose casings and tubings, etc., has plans for the construction of a large addition to the plant in North Little Rock, Ark., for the production of a line of non-woven fabrics for use as toweling, curtains, filters and other service. This is a new branch of output for the company. The addition will be comprised of a main and multi-story building and several auxiliary structures. The cost is reported to be close to $1,000,000, with machinery.

Athens (Ga.) Mfg. Co., spun rayon blends, shade cloths, etc., has completed the installation of a number of additional looms and accessory equipment for the production of a new pique weave of cotton, suitable for women's dresses.

Swift Spinning Mills, Inc., Columbus, Ga., cotton yarns, has work underway on an addition to the plant for expansion in the main mill, with a smaller unit for warehouse service.

Arms Textile Mfg. Co., Inc., worsted interlinings, bunting, yarns, etc., has approved plans for a new boiler house at the mill in Manchester, N. H., estimated to cost about $60,000.

Peerless Finishing Corp. has been chartered with a capital of 2000 shares of stock, no par value, to operate a mill for dyeing and finishing fabrics, yarns, etc., in the vicinity of Paterson, N. J.

Electric Vat Processing Co., Inc., recently incorporated in Paterson, N. J., has plans for the operation of a dyeing, bleaching and printing mill.

Franklin Process Co., Philadelphia, Pa., operating a dyeing and bleaching plant, has let general contract for alterations and improvements in the mill, reported to cost close to $75,000.

Lanell Fabrics, Inc., Central Falls, R. I., has been chartered to operate a mill for the manufacture of a line of worsted-blend fabrics. Clifton E. Allen heads the new organization.

U. S. Finishing Co. has work in progress on the removal of the cotton printing and dyeing plant of their subsidiary, Queen Dyeing Co., Providence, R. I., to the main mill at Norwich, Conn.

Edenfield Mills, Inc., has been chartered with a capital of $500,000 to manufacture cotton and woolen fabrics in the former one-story plant of Textron Southern, Inc., near Leesville, S. C., which the company has recently acquired. Improvements will be made and equipment installed; a dyeing and finishing division is also proposed.

Luray (Va.) Textile Division, Schwarzenbach-Huber Corp., nylon yarn, has begun construction of a one-story addition to be equipped as a throwing mill for hosiery yarn production.

Cranston (R.I.) Print Works Co. has active work in progress on a mill at Fletcher, N. C., to be given over to finishing work.

Consolidated Piece Dyers, Ltd., of Canada has been acquired by the Bradford Dyers' Association, and will be renamed **Bradford Dyeing Association (Canada), Ltd.** Firm will proc-

(Continued on page 263)

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COLOR

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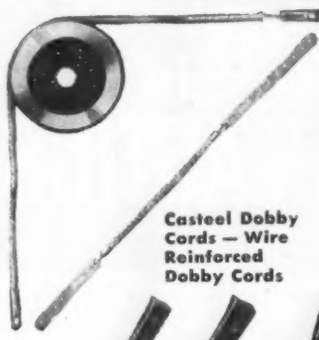

Casteel Dobby Cords — Wire Reinforced Dobby Cords

Reinforced Verybest Lug Straps with and without plug

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Plyweld Picker Sticks Sweepsticks

Rubber Tubular Spindle Bumpers

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Harness Roll Bearings
Heads — Sweepstick
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Jack Sticks
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Lap Roll Cushion Rings
Laysword Reed Caps
Lease Rods
Lug Straps (Canvas, Leather, Wood)
Parallel Plugs
Picker Sticks (Plyweld, Pakweld, Plastex, Hickory)
Pickers — Types: Silk, Plush, Loop, Box and Doll
Power Sticks
Race Plates
Reinforcing Strips (Plastic)
Roll Sticks — Under Clearer
Roving Sticks
Sand & Take Up Roll Covering
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Swells
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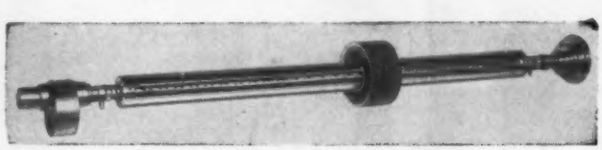

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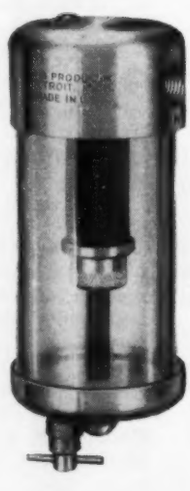
Do You Have WATER, DIRT or SLUDGE IN YOUR AIR-LINES?



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is equipped with RIBBON TYPE FILTERING ELEMENT . . . Removes solids 10 microns (.00039) and larger. It is a radical departure from general practice, bowl being a transparent plastic. Consequently all foreign matter filtered from the air-line is clearly visible, eliminating guess work as to when filtering element should be cleaned or bowl drained . . . There is NO WATER, DIRT OR OIL in compressed air that has passed through this filter . . . This piece of equipment gives maximum protection to air-operated controls on Slashers and Humidifiers, also Blow-off of the Knotting Device on Barber-Colman Spoolers, also Abbott Winders and Blow-off hoses in Weaving and Spinning Rooms . . . This new Filter affords our "Amoskeag" Pneumatic ROLL PICKER, Model A.V.T., or similarly operated equipment, maximum protection.

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This service is restricted to those engaged in operation and management of textile industries

First Listing of New Publications

10-1. Nitrosyl Chloride. New 16-page report of the properties and reactions of Nitrosyl Chloride, taken from a paper presented before the American Chemical Society by T. J. McGonigle. Contains much heretofore unpublished data. Product Development Dept., Section U, Solvay Process Div., Allied Chemical & Dye Corp., New York 6, N. Y.

10-2. Worsted Spinning. Booklet, fully illustrated, on Saco-Lowell System for worsted spinning, from top to yarn in five economical and efficient stages. Saco-Lowell's new system is explained in detail and will be of interest to all concerned with worsted spinning. Saco-Lowell Shops, 60 Batterymarch St., Boston, Mass.

10-3. Roll Slitters & Unwinders. Bulletin No. 549 describes and illustrates this manufacturer's line of slitters and unwinders. Contains 14 illustrations with descriptive text on each piece of equipment. Johnstone Engineering & Machine Co., Parkesburg, Pa.

10-4. New Type Railing. The manufacturer claims that Nu-Rail cuts installation time up to 80%. All pipe threading and welding are eliminated. The Slip-On feature permits free passage of the pipe which is firmly engaged by two hollow point set screws recessed into each reinforcing rib. Three basic fittings produce fourteen different arrangements. Reynolds Metals Company, 2500 S. 3rd St., Louisville, Ky.

10-5. Quartermaster Corps. "How to do Business With the Quartermaster Corps" is the title of this booklet which is designed basically as a guide to manufacturers interested in selling to the Quartermaster Corps. New York Quartermaster Purchasing Office, New York 3, N. Y.

10-6. Diamond Standard Silicates. Prepared expressly for busy production and purchasing executives, this 20-page booklet is designed for quick reference and describes ten standard grades of Diamond liquid silicates of soda commercially available. Diamond Alkali Company, 300 Union Commerce Bldg., Cleveland 14, Ohio.

10-7. High Speed Comber. Attractive folder describing the new Whitin Model "J" eight-head, high-speed comber. Detailed photos illustrate this model's new features. Whitin Machine Works, Whitinsville, Mass.

10-8. Vacuum Pump Catalog. A 36-page, three-color catalog and data book is now available which describes the complete line of Stokes Microvac pumps and their applications in research and industry. F. J. Stokes Machine Co., 5900 Tabor Road, Philadelphia 20, Pa.

10-9. Synchro-Lectric Viscometer. Simple to handle, clean and maintain, and quickly portable to any spot in a plant where an electric outlet is available, the unit makes it possible to measure viscosity in a matter of seconds and as easily as a temperature reading. Brookfield Engineering Laboratories, Inc., 022 Porter St., Stoughton, Mass.

10-10. Mot-O-Trol. New 23-page booklet on Mot-O-Trol, a packaged electronic, adjustable speed drive for precise control of d-c motors operated from a-c sources. Westinghouse Electric Corp., P. O. Box 868, Pittsburgh, Pa.

10-11. Air Diffusers. Bulletin 28 explains the operation and application of Type HU air diffusers for projection unit heaters. Folder contains photos showing how this air diffuser is attached to nine different unit heaters produced by well-known American Manufacturers. Anemostat Corporation of America, 10 East 39th St., New York, N. Y.

10-12. Variable Speed Control. Eight page bulletin completely describing the improved design of Reeves Vari-Speed Jr. unit for light horsepower requirements. Bulletin includes description, photographs, rating and dimension tables, and prices. Reeves Pulley Co., Inc., Columbus, Ind.

10-13. Synthetic Resins. Revised edition of the technical booklet describing properties and uses of this manufacturer's synthetic resins. A key to specific uses is provided by a chart which matches the resins with their actual and potential uses. Hercules Powder Co., Wilmington, Del.

10-14. Valve Parts. "Names of Valve Parts" is a new bulletin which valve users and purchasers will find to be a valuable addition to their files. Diagramatic sketches of gate, globe, check and lever operated valves are presented along with a uniform material and parts identification code. The Cooper Alloy Foundry Co., Hillside 5, N. J.

10-15. Faceshields. Featured in a 4-page folder are M.S.A. faceshields for protection in handling acids and other chemicals, pouring hot metal, sanding, grinding, etc. Mine Safety Appliances Company, Braddock, Thomas and Meade Sts., Pittsburgh 8, Pa.

10-16. Wool Spinning Frame. The new Simplex Model "F" wool spinning frame is fully described and pictured in a 24-page booklet just announced. Davis & Furber Machine Co., North Andover, Mass.

10-17. PC Glass Blocks. Contains general and technical data, illustrations, construction details and specifications, divided into decorative and functional groups and elaborating upon the specific advantage of each, forty pages in length. Pittsburgh Corning Corp., 307 Fourth Avenue, Pittsburgh, Pa.

10-18. Recombing Unit. Descriptive folder on recombing unit manufactured by Officina Meccanica Sant' Andrea Novara, of Novara, Italy. Ernest L. Frankl Associates, 22 East 40th St., New York 16, N. Y.

10-19. Baskets, Hampers & Trucks. Four page, 3-color circular containing complete descriptions and illustrations of the Dandux line in catalog digest form. Handy file size reference. C. R. Daniels, Inc., Daniels, Md.

10-20. Reeds Upkeeping Machine. Informative bulletin available which describes the fully automatic reeds upkeeping machine manufactured by Luigi Winsemann, Studio Techico Industrials, Milano, Italy. Available in United States from—American Textile Engineering, Inc., Arlington, N. J.

GENERAL ECONOMIC, MANAGEMENT . . .

4. HOW FACTORING CAN INCREASE PROFITS—Describes how factoring works out in keeping clients' capital liquid and attitude of factor toward checking credits, including typical balance sheet.—COMMERCIAL FACTORS CORP., New York City.

5. FACTORING AND FINANCING — Illustrated booklet on how factoring works, cost and credit information.—TEXTILE BANKING COMPANY, New York, N. Y.

6. ROYCE REPORTER—Published quarterly containing information of general interest to the textile field.—ROYCE CHEMICAL CO., Carlton Hill, N. J.

7. RAYON TELLS ITS STORY TO THE PUBLIC—Folder containing reprints of advertisements explaining some of the many roles in which rayon is serving the American public.—AMERICAN VISCOSE CORPORATION, New York 1, N. Y.

8. "WASTE REDUCTION AND CONTROL" — 19-page illustrated booklet giving primary waste factors; how to calculate cost of departmental waste; actual waste figures from mills; contains survey of waste practices.—SOUTHEASTERN ENGINEERING CO., West Point, Ga.

10. "LABOR AND MANAGEMENT BENEFIT BY INDUSTRIAL ENGINEERING PRINCIPLES"—8-page illustrated folder outlining principles of industrial engineering as they apply to textiles.—AMERICAN ASSOCIATED CONSULTANTS, INC., New York, N. Y.

11. FLETCHER JUNIOR "SUPER-SELF-BALANCING" EXTRACTOR—Illustrated folder describing this new extractor with the highly efficient self-balancing arrangement which uses steel springs instead of rubber buffers.—FLETCHER WORKS, INC., Philadelphia, Pa.

PLANT AND PLANT MAINTENANCE . . .

102. "TANK TALK"—Sixteen page booklet of illustrations showing various types of elevated steel tanks constructed and erected by manufacturers as well as stand pipes, reservoirs, storage and high pressure vessels, cylinders, along with helpful technical data. Also a list of what a few of the cotton mills, etc., said.—R. D. COLE MANUFACTURING COMPANY, Newnan, Ga.

103. HUMIDIFICATION, EVAPORATIVE COOLING—Bulletins available displaying AMCO automatic self-cleaning atomizers, controls, and evaporative cooling equipment.—AMERICAN MOISTENING COMPANY, Providence, R. I.

104. SURFACE MAINTENANCE — Complete literature and details on the method of diagnosing surface maintenance problems and selecting the proper chemicals and coatings to solve them.—STEELCOTE MANUFACTURING CO., St. Louis, Mo.

105. FLUORESCENT LIGHTING FIXTURES—Specification sheets describing in detail industrial lighting fixtures of particular interest to the textile industry. Full information given on construction, light curve, methods of hanging, etc.—SMITHCRAFT LIGHTING DIVISION, Chelsea 50, Mass.

107. FINNELL SCRUBBERS — Illustrated leaflets describing and giving specifications for the new Finnell floor scrubbing machines.—FINNELL SYSTEM, INC., Elkhart, Ind.

109. FIRE EXTINGUISHER — Folder available which describes the All-Out extinguisher which does not contain corrosive liquids or other ingredients harmful to fabrics or textile machines. Available from Atlanta representative. — ATLANTIC FIRE EQUIPMENT MFG. CO., 258 Spring St., N.W., Atlanta, Ga.

115. ATOMIZER HUMIDIFIER — Recent issue of "Parks' Parables" on Turbomatic self-cleaning humidifiers, and automatic regulation. — PARKS-CRAMER CO., Fitchburg, Mass., and Charlotte, N. C.

129. BAHNSON CENTRIFUGAL HUMIDIFIER—Bulletin 327 describes this completely self-contained industrial humidifier which requires only water feed and drain and electrical connection to install.—THE BAHNSON COMPANY, Winston-Salem, N. C.

135. SAFETY COLOR CODE—How six standard colors can be used to reduce hazards, cut down accidents.—E. I. DU PONT DE NEMOURS & CO., INC., Finishes Division, C44, Wilmington, Dela.

138. MAGNESIUM IN THE TEXTILE INDUSTRY—Illustrated booklet on properties of magnesium for spinning, twisting, winding, knitting machines, looms, beams, spools, bobbins.—ALUMINUM CO. OF AMERICA, Pittsburgh, Pa.

150. RIHCO HUMIDIFIERS AND COOLING SYSTEMS—Bulletin describes new atomizers with construction lessening air consumption in humidifier systems, evaporative cooling systems. — ALDRICH MACHINE WORKS, Greenwood, S. C.

151. INDUSTRIAL BRUSHES—Illustrated Booklet of industrial brushes featuring textile usage on shears, printing machines—also flock, raising and cylinder brushes.—M. W. JENKINS' SONS, INC., Cedar Grove, N. J.

152. AIR CONDITIONING FOR THE TEXTILE INDUSTRY—40-page illustrated book covering air conditioning from humidity control to complete refrigerated conditioning with installations, charts, covering ABC's of cooling textile mills.—CARRIER CORP., Syracuse, N. Y.

159. BAHNSON HUMIDUCT SYSTEM — Bulletin 330 describes this unit system of air conditioning for humidifying, cooling, heating, ventilating, filtering, and dehumidifying in any desired combination. —THE BAHNSON CO., Winston-Salem, N. C.

162. MODERN METHODS OF TEXTILE FLOOR MAINTENANCE—Illustrated treatise on the history of floor cleaning in textile plants and a detailed description of new methods for reducing floor cleaning costs, as well as preserving textile mill floors.—G. H. TENNANT COMPANY, Minneapolis 11, Minn.

163. LAWLOR FLOOR MACHINES — Illustrated pamphlet containing specifications and describing All-Purpose Floor Machines.—THE SELIG COMPANY, Atlanta, Ga.

166. OAKITE PLANT MAINTENANCE DIGEST—A 16-page manual describing materials and methods for handling 54 recurring maintenance cleaning and related tasks in factories and mills.—OAKITE PRODUCTS, INC., New York 6, N. Y.

170. WHY IT PAYS TO ANCHOR YOUR TEXTILE MACHINES WITH UNISORB — Illustrated booklet discussing control of vibration and noise and how UNISORB reduces maintenance costs.—THE FELTERS CO., Boston, Mass.

172. VENTILATING FANS — Bulletin 3339 gives facts on Buffalo Ventilating Fans. — BUFFALO FORGE CO., Buffalo, N. Y.

177. DUCTLESS AIR CONDITIONING — Recent bulletin describing same.—AMERICAN MOISTENING COMPANY, Providence, R. I.

179. TOLEDO SCALES — A condensed catalogue which illustrates and describes all of the principal types of weight control equipment used in the textile industry. — TOLEDO SCALE COMPANY, Toledo, Ohio.

181. AIR FILTRATION AND DUST CONTROL—24 pages on atmospheric control, including engineering data.—AMERICAN AIR FILTER CO., INC., 275 Central Avenue, Louisville 8, Ky.

POWER TRANSMISSION, MOTORS, BELTING, LUBRICATION . . .

201. ROLLER CHAINS, ETC.—Catalogs RC-49 and V-135-46 supply practical information, advantages and complete specifications helpful in selecting the proper power transmission chain drive to meet the requirements of textile machinery.—WHITNEY CHAIN & MFG. CO., Hartford, Conn.

202. RELIANCE MOTOR—Bulletin C-130 on the explosion-proof, corrosive-resisting a-c motor. Design features exclusive with the new motor are enumerated and illustrated in the bulletin.—THE RELIANCE ELECTRIC & ENGINEERING CO., 1076 Ivanhoe Road, Cleveland, Ohio.

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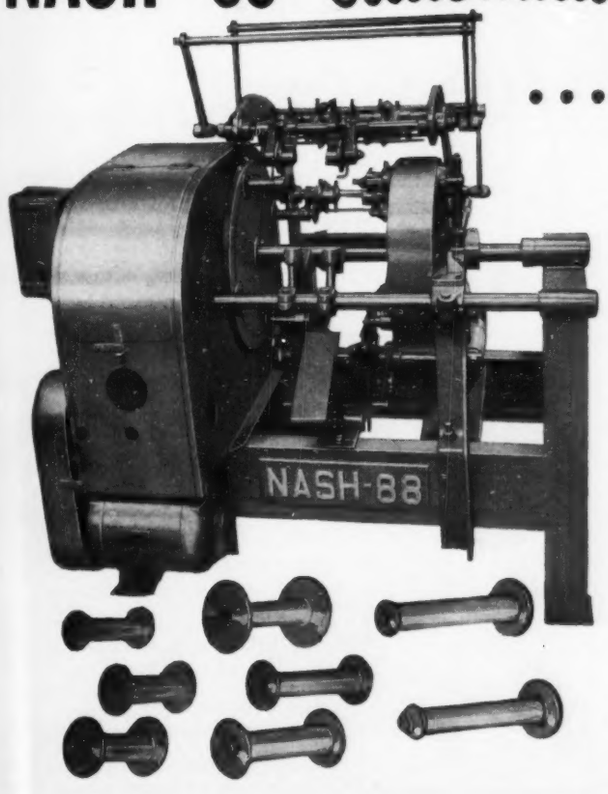
768. TEXTILE CHEMICALS—Buying guide and reference book giving facts about Amalgamated Products, the fabrics on which they give best results, their proper application, and their chemical composition.—AMALGAMATED CHEMICAL CORP., Philadelphia 34, Pa.

769. SURFACE TENSION DEPRESSANT — The Booklet, "Mercerizing and Alkamerce—The Ideal Dry Mercerizing Penetrant," introduces a new product which can be used as a wetting agent; a dye leveling agent, a penetrant in package dyeing.—HART PRODUCTS CORP., New York, N. Y.

771. "STARCH STABILIZER" — Folder on Vanesta, a product used for textile sizing and print-

NASH "88" *Automatic* BOBBIN REFINISHER



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ing, discussing stabilization and the results obtained. —R. T. VANDERBILT CO., New York 17, N. Y.

772. **"STANDARD SILICATE ALKALIES"** — Booklet descriptive of silicate and silicated alkalies and their uses. These uses include for silk weighting, in peroxide bleaching, boiling of cotton, textile finishing, etc. — DIAMOND ALKALI COMPANY, Cleveland, Ohio.

773. **TECHNICAL CHEMICAL DATA SHEETS**—Complete set for dyeing, printing and finishing operations, showing major operations, performance and advantages.—ONYX OIL & CHEMICAL CO., Jersey City 2, N. J.

774. **ROYCE TEXTILE CHEMICALS**—This booklet briefly describes the leading Royce products for textile processing printing, dyeing and finishing.—ROYCE CHEMICAL COMPANY, Carlton Hill, N. J.

KNITTING . . .

801. **THE WILDMAN SINGLE-HEAD FULL-FASHIONED HOSIERY MACHINE** — Literature on request from the WILDMAN MFG. CO., Full-Fashioned Division, Norristown, Pa.

803. **THE TUBE-TEX FOR TUBULAR KNIT GOODS**—Bulletin describing this modern machine which extracts, processes, dries, conditions and folds in one continuous operation, lowering costs, saving labor, power, space and waste.—H. W. BUTTERWORTH & SONS CO., Philadelphia, Pa.

809. **TEXACO IN THE KNITTING INDUSTRY**—Folder on knitting mill lubrication.—THE TEXAS CO., New York, N. Y.

810. **ALUMINUM BEAMS**—Catalog No. 1-21 describes Hayes magnesium and aluminum specialties for the textile industry. Illustrates this company's beams that are one-third the weight of conventional types.—HAYES INDUSTRIES, INC., Jackson, Mich.

811. **CIRCULAR KNITTING MACHINES**—Interesting, informative and well illustrated is this six-page folder, just released, which describes this company's small diameter circular knitting machine.—H. BRINTON COMPANY, Philadelphia 24, Pa.

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820. **VARIABLE STRIPES AND PLAIDS** — Booklet describing Supreme Models SA and SA-ROF Stripers for knitting plaids, checks, "floatless" designs and variable stripes.—SUPREME KNITTING MACHINE CO., INC., Brooklyn 6, N. Y.

822. **HIGH SPEED JERSEY CIRCULAR MACHINE**—Complete illustrated brochure showing features and highlights of this 100 yard per hour producer. Also available — New Cylinder Chart. — SUPREME KNITTING MACHINE CO., INC., 105 Johnson Ave., New York.

828. **THE KIDDE KNITTER**—Bulletin describing the newest in Raschel-type warp knitting machines and the higher production rates attained with it.—KIDDE MANUFACTURING CO., INC., Bloomfield, N. J.

SEWING MACHINES . . .

905. **LOCKSTITCH INSTRUCTION BOOK**—Form 904. Contains a wealth of information for owners, mechanics and operators. — WILLCOX & GIBBS SEWING MACHINE CO., New York, N. Y.

915. **THE NEW UNION SPECIAL LOCKSTITCH MACHINE**—Information on the new model which cuts production time on sewing operations is contained in Bulletin No. 258.—UNION SPECIAL MACHINE CO., Chicago 10, Ill.

936. **FLAT BED SEAMING MACHINE**—Full information contained in bulletin No. 936 on Type 1101 "W & G" Flat Bed Seaming Machine.—WILLCOX & GIBBS SEWING MACHINE CO., 214 West 39th St., New York 18, N. Y.

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1001. **HOW TO DETERMINE WHERE OVERHEAD MATERIALS HANDLING EQUIPMENT CAN BE USED PROFITABLY** — Profusely illustrated. Gives clear, concise understanding of materials handling. Helps you to determine where and what equipment might be used to speed production and increase profits. — CLEVELAND TRAMRAIL DIV., Wickliffe, Ohio.

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1008. **CASTERS AND WHEELS**—An illustrated booklet with complete specifications showing a complete assortment of Colson Textile Casters.—THE COLSON CORP., Elyria, Ohio.

1009. **CANVAS PRODUCTS**—A complete listing with illustrations of Dandux Canvas Products. For easy fingertip reference and handy file size. Brief but factual information.—C. R. DANIELS, INC., Daniels, Md.

1025. **CAB-OPERATED AND FLOOR-OPERATED ELECTRIC HOISTS**—Bulletin No. 127 describing and illustrating electric hoists of various types and capacities. — SHEPARD NILES CRANE & HOIST CORP., Montour Falls, N. Y.

1027. **SINGLE BEAM CRANES**—Bulletin No. 130 describing and illustrating the single beam type of overhead traveling crane.—SHEPARD NILES CRANE AND HOIST CORP., Montour Falls, N. Y.

1030. **C-D HOLLOW WARE**—This 32-page catalog, R-11, profusely illustrated in color, shows Continental-Diamond's line of boxes, trucks, cans, barrels, baskets and trays. Complete description and specifications are given on each item.—CONTINENTAL-DIAMOND FIBRE CO., Newark 38, Del.

MISCELLANEOUS . . .

1101. **AUTOMATIC BOBBIN REFINISHER**—A descriptive bulletin illustrating and describing method of refinishing throwing bobbins on a production schedule.—J. M. NASH COMPANY, 2360 N. 30th St., Milwaukee, Wis.

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1107. **AUTOMATIC QUILL POLISHER**—Bulletin describes production machine for refinishing loom bobbins. Tells how quills can be kept in perfect condition at minimum labor cost.—J. M. NASH CO., 2360 N. 30th Street, Milwaukee 10, Wis.

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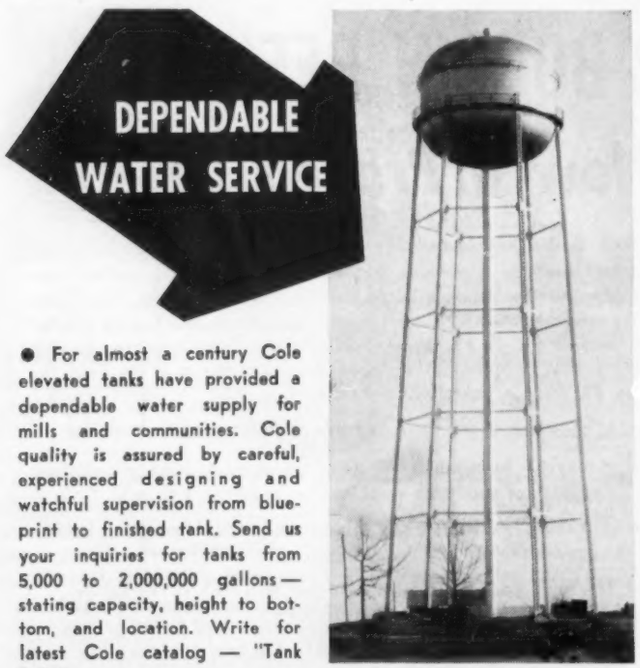

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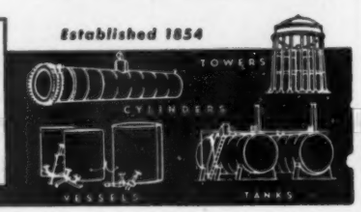

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(*Continued on next page*)

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Textile Mill News

(Continued from page 253)

ess all types of Canadian wool piece goods and also unfinished imported goods.

Acme Piece Dye Works, Inc., is a new finishing plant at Paterson, N. J.

Anniston (Ala.) Mfg. Co., Inc., drills twills, etc., has begun the erection of a one-story addition for expansion in the offices.

Dallas Mfg. Co., Inc., Huntsville, Ala., sheetings, has sold its mill buildings and warehouses to **Madison County Mills, Inc.,** a new organization.

Profile Cotton Mills, Jacksonville, Ala., weaving and knitting yarns, has purchased certain equipment from textile mills in Boaz and Huntsville, Ala., recently liquidated. Equipment will be installed in the near future.

Clark Thread Co., cotton thread, has plans maturing for a one-story addition to the mill in Albany, Ga., to be used for warehouse service.

Bibb Mfg. Co., Macon, Ga., has plans for a new office building to adjoin Mill No. 2. The cost is reported to be close to $250,000.

Larabil Textiles Corp., Fall River, Mass., has been chartered to manufacture cotton and woolen yarns. Lawrence H. Kelly is president of the new concern.

Hathaway Mfg. Co., New Bedford, Mass., cottons, rayons, cotton and rayon mixtures, has arranged for an appropriation of about $750,000, to be used for modernization and improvements in the mill during 1949.

A. L. Textile Co., recently organized, is now operating a mill in Somersworth, N. H., for spinning and weaving of worsted goods. August Lepoutre, head of Lafayette Worsted Spinning Co., Woonsocket, R. I., is president and treasurer of the new organization.

Progressive Silk Finishing Co., Hoboken, N. J., has leased a one-story building to be used for warehouse facilities.

S. Stroock & Co., Inc., Newburgh, N. Y., camels hair cloth, woolens, cashmere cloth, etc., has arranged for the purchase of adjoining land and buildings held and occupied by Weil Brothers Textiles, Inc., chenille wool carpets. Weil Brothers will discontinue this line of output and will concentrate production at its Rhode Island mill for the manufacture of broadloom carpets.

Travora Textiles, Inc., recently

SCRUBS and SQUEEGEES FLOORS

LAWLOR 20-D

DOES BOTH JOBS

Only one operator is required to run this remarkable two-in-one machine. Clean water is fed from one tank upon the soaped floor, the 19" diameter revolving brush scrubs it quickly and thoroughly. Then a rubber squeegee mops up the dirty water which is vacuum pumped into a second tank.

JUST THE THING FOR LARGE AREAS

The Lawlor 20-D is only 22" wide and can be used in congested places around machines, counters and desks. Available for either AC or DC current.

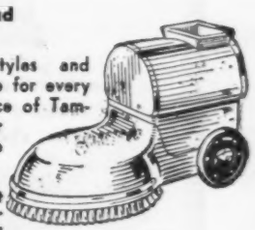
MOP WRINGERS

All steel with perforated rolls. Easy foot-lever operation. Made for one or two pails.

MOPPING TANKS

Heavy galvanized steel with welded seams. Two compartments, each with shut-off. Foot pressure wringers. 30 or 60-gallon capacity.

SCRUBBERS and POLISHERS



12 different styles and sizes, a right size for every need. Your choice of Tampico, Palmetto or Steel Wire brushes.

Lawlor Equipment is sold and serviced by local Janitor Supply Houses.

Write for Catalog giving description on the complete line

S. C. LAWLOR CO.

Makers of Quality Equipment for 50 Years

121 N. Aberdeen St., Chicago 7, Ill.

chartered, has acquired Travora Mfg. Co., Inc., Graham, N. C., canton flannels. Production will be maintained by the new organization without change.

Hamby-Nolen, Inc., recently chartered with a capital of $100,000, plans to operate a textile processing plant in Greensboro, N. C. W. W. Hamby and R. E. Nolen head the new concern.

Duplan Corp., Lincolnton, N. C., is in the process of changing their line of production from spun rayons to all-filament fabrics. A number of new looms and auxiliary equipment will be installed, and the spinning equipment will be removed and sold.

A. Olek & Son, Inc., Philadelphia, Pa., upholstery fabrics, has plans for a new one-story mill addition, reported to cost close to $80,000, with equipment.

Navaho Weaving Co., Esmond, R. I., rayon fabrics, has let contract for a boiler house at the mill, and construction has been started.

Manville Dyeing & Finishing Co., Inc., Lincoln, R. I., has been chartered with a capital of $150,000 to operate a dyeing, printing and finishing mill. Francis W. Conlan, West Warwick, R. I., is the principal incorporator.

Sayles Finishing Plants, Inc., Saylesville, R. I., has plans underway for a new water-treatment plant at the mill.

Springs Cotton Mills has begun proceeding on converting the Springstein mill in Chester, S. C., from carded to combed broadcloth products. Plans have been approved for a new addition, and about 5000 new spindles will be installed, as well as rewinding and other equipment.

Carolina Fibre Mills, Inc., Spartanburg, S. C., has begun construction of a one-story addition to the processing plant, to be used for expansion in warehouse facilities.

Employees of Greensboro (N.C.) Weaving Plant, **Burlington Mills Corp.,** have received a second consecutive Liberty Mutual Insurance Company accident prevention award for a record of two million man-hours of operation without a lost-time accident.

Insect-Proofing Cotton Bags

(*Continued from page* 94)

folium confusum Duv.). An untreated bag contained 182 live flour beetles and 26 live flat grain beetles.

Baking tests conducted by the Milling Department of Kansas State College in July 1946 showed no ill effect of the chemicals on the baking qualities of flour packed in the treated bags.

Methods of Impregnating Bags. Tests with cotton bags were continued to determine minimum effective dosages and to perfect commercially practicable methods of application. The material for the bags was prepared at the Southern Regional Research Laboratory of the Bureau of Agricultural and Industrial Chemistry, at New Orleans, La. Unbleached sheeting having 48 yarns per inch in both warp and filling was impregnated with water dispersions of a 1-10 pyrethrins-piperonyl butoxide mixture in connection with the usual padding process, of such strengths that the finished cloth contained 5, 2.5, or 1.25 mg. of pyrethrins per square foot.

To insure complete and uniform penetration, a wetting agent of the sulfated fatty-alcohol type was used, and the padding mixture was heated to boiling. The treated cloth was then dried in a hot-air drier at 212° F. Bags 5 by 8 inches made from the treated cloths were filled with insect-free flour and exposed to insect infestation for 8 months. Good protection was obtained with bags treated at the highest dosage but not at the two lower dosages.

In another series of tests, bags made from unbleached cotton cloth treated with different dosages of 1-10 mixture of pyrethrins and piperonyl butoxide and also with pyrethrins alone were filled with insect-free flour and exposed for 7 months to continuous infestation by the confused flour beetle, the cadelle (*Tenebroides mauritanicus* (L.)), and the Mediterranean flour moth (*Ephestia kuehniella Zell.*). At the end of the second, fourth, and seventh months the bags were examined and the number of insects recorded, and the bags refilled with insect-free flour.

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Reg. U.S. Pat. Off.

GENUINE TON-TEX
LOOM HARNESS STRAPPING
Operates Better — Lasts Longer

Genuine Ton-Tex is made of plies of fine quality cotton fabric welded together. Balanced construction. Strong, flexible, absorbs shock easily. Operates at low maintenance cost.

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GREENSBORO, N. C.
217 JEFFERSON BLDG.
BOSTON 10, MASS.
122 PEARL ST.

The data given in Table 1 (page 266) indicate that satisfactory protection against these insects for a 7-month period was afforded by pyrethrins used alone or in combination with piperonyl butoxide, at all the dosages tested.

The pyrethrins deteriorate rapidly when exposed to light. To determine whether the repellency of treated cotton bags would also be affected by exposure to light, bags made of cloth treated with the 1-10 pyrethrins-piperonyl butoxide formulation at the rate of 10 mg. of pyrethrins per square foot were filled with insect-free flour and exposed to insect infestation in darkness, in indirect light, and in direct sunlight. When the flour was examined at the end of 7 months, it was found that the insect repellency was retained under all conditions.

In the investigation of techniques for applying the repellent to cotton cloth, the 1-10 pyrethrins-piperonyl butoxide formulation was applied to warp yarn during the size operation. The sizing consisted of 15 ounces of 40-fluidity thin boiling cornstarch per gallon of water, cooked by boiling with an open steam line for 1 hour, to which 6% of emulsified beef tallow, based on the weight of the starch, was then added. The insect repellent was also added after the starch was cooked.

The cooking of the starch and the sizing operation were carried out in the laboratory under conditions similar to those in mill practice. The sized warp was wound on a loom beam and woven into sheeting 12¾ inches wide, with untreated filling. The cloth weighed approximately 5½ ounces per square yard, and contained 46 by 50 yarns per square inch. The dosages of the pyrethrins-piperonyl butoxide mixture were such as to give 8 and 4 mg. of pyrethrins per square foot. Identical cloth was woven for bags from yarns containing no repellent.

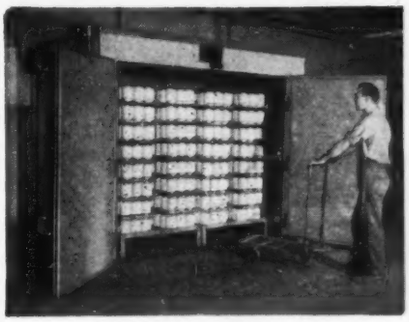
It should be emphasized that in the treated cloth only the warp yarns contained the repellent. If both warp and filling had been treated, the dosages would have been about twice as heavy. The cloth was made into bags which were filled with insect-free flour

Series 11 of typical "H-W" CONDITIONER applications.

"H-W" CONDITIONERS

in use by

THE SCHWARZENBACH HUBER COMPANY



View of new "H-W" CONDITIONER installed in mill of Luray Textile, Division of The Schwarzenbach Huber Company at Luray, Va., where other "H-W" CONDITIONERS have been in use for many years.

in the following mills:
LURAY, VA.
BETHLEHEM, PA.
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New plant of Schwarzenbach Huber Company, Bethlehem, Pa., equipped with "H-W" CONDITIONERS

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Full particulars in Bulletin UC 3, upon request.

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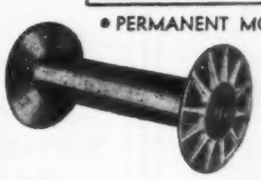
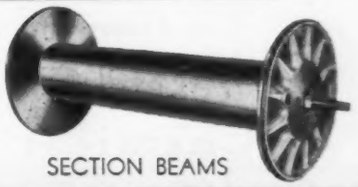
MILTON LIGHT METAL BEAMS are the result of years of close collaboration with mill production men . . .

• PERMANENT MOLD HEAD TRICOT BEAMS





SECTION BEAMS

MILTON MACHINE WORKS, Inc.
DESIGNERS — ENGINEERS — MANUFACTURERS
MILTON, PENNA.

TABLE 1.—Resistance of cotton bags treated with various dosages of pyrethrins, with and without piperonyl butoxide, to penetration by insects.

Dosage of repellent (milligrams per square foot of cloth)		Number of bags treated	Average number of insects per bag after—		
Pyrethrins	Piperonyl butoxide		2 months	4 months	7 months
10	100	4	1.75	0	0
7.5	75	4	1	1.25	0
5	50	4	0	.25	2
10	0	3	0	0	1
20	0	3	0	0	1
50	0	3	0	0	0.33
Untreated		1	60	60	443

and tested over a 4-month period. At the end of this time no insects were found in four replicate bags treated at the higher dosage, and only 1 insect in one of the four bags treated at the lower dosage.

To test the persistence of the treatment on unfilled bags, treated bags were stored for 5 months and then filled with flour and exposed for 2 months to an extremely heavy infestation of Mediterranean flour moths, confused flour beetles, cadelles, and lesser grain borers (*Rhyzopertha dominica* (F.)). No insects penetrated any of the bags that had been treated at either dosage, whereas untreated bags exposed to the same infestation contained so many insects that it was impractical to count them. During the test period insects were seldom seen on the treated bags, whereas large numbers crawled over the untreated bags. There was little mortality of flour beetles forced to remain on treated cloth for long periods.

Conclusion. These experiments show that bags made from cotton that has been treated with the extremely light dosages of pyrethrins, alone or mixed with piperonyl butoxide, as discussed previously, will protect flour packed therein from insect infestation for at least 7 months. These chemicals are of a comparatively low order of toxicity to warm-blooded animals, and it seems unlikely that at the rates and methods of application used in these experiments they will contaminate products packed in treated bags. Further work is needed, however, to settle this question and to determine the minimum effective dosages.

Treated cloth is not materially changed in appearance. Pyrethrins give it a slight though not objectionable odor.

At present prices the cost of the treatment is low enough to make commercial application practicable.

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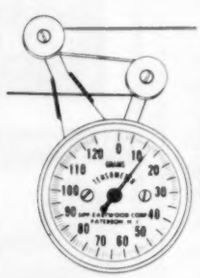
SAY OUR MILL MEN



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"We therefore have resolved to order additional Tensometers."

You, too, will find the Sipp-Eastwood Tensometer "indispensable." It will save you money and time by enabling you, your workers and overseers to detect faulty tensions that cause tight and loose ends, and later, "seconds."

The new Sipp-Eastwood Tensometer is a pocket-size precision instrument that gives a steady reading without fluctuation in all uses. Knurled case prevents its slipping out of your hand.

The Tensometer is used: In warping, where uneven tension may cause end breaks or adhesion of ends during weaving. In winding, to adjust swifts uniformly. In quilling, to prevent hard and soft quills.

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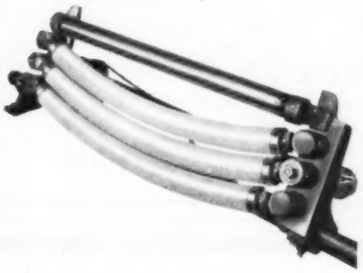
with oilite or ball bearings, both with dynamic balance.



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SUPPLIERS' NEWS

WHAT THEY ARE DOING

William Woosnam, formerly associated with B. F. Perkins and Son., Inc., has been chosen sales manager of Appleton textile finishing rolls by **The Appleton (Wis.) Machine Co.**

A. Clayton Graham has been appointed sales representative in New

Mr. Graham

England by the **Standard Pressed Steel Co.**, Jenkintown, Pa.

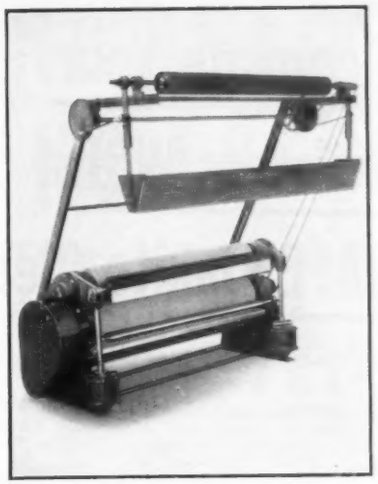
The following advancements have been announced by the **Diamond Alkali Co.**: Earl J. Mills, former manager of less-carload sales in Chicago, Ill., has become manager of the southwest sales district, which embraces the states of Texas, Oklahoma and Kansas. Charles W. Klaus, former manager of carload sales in Chicago, has been named to take complete charge of the company's sales activities affecting the area of Illinois, Indiana, Iowa, Michigan, Minnesota, Wisconsin and Nebraska.

H. E. Kresse has joined **Finetex Inc.**, which he will represent in Pennsylvania and New York, establishing his headquarters in Allentown, Pa.

Kenneth E. Reynolds, former assistant manager of the photographic lens sales department, has succeeded Charles C. Nitchie, retired, as manager of the analytical instrument sales at **Bausch & Lomb Optical Co.**, Rochester, N. Y.

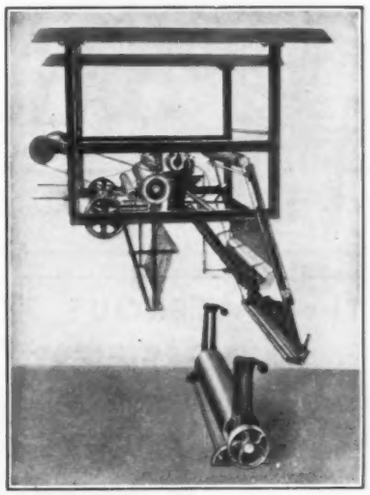
Joseph A. Amato, former account executive, has been elected assistant vice-president of **James Talcott, Inc.**, factors.

Draper Corp., Hopedale, Mass., has purchased 35 acres of land eight miles east of Asheville, N. C., and their plans are to expand the manufacture



SQUEEZE ROLL UNIT

New Heavy Duty (30,000 lbs.) Roller Bearing Unit for extracting, padding, and applying resin treatments. Pressure applied by air cylinders. Equipped with brush for removing flocks, flock tray, drain pan, folder, and variable speed drive. Roll shafts of large diameter extending all the way through the rolls.



Improved Simplified Ceiling Type Power Perch with Forward, Reverse and Variable Speed, Positive Motor Drive, with Fluorescent Through Lighting Panel, Yardage Counter, Folder and Winding Machine. Selvedges may be easily matched. For finish or rough perching.

Patent Re-Enforced Adjustable Slot Vacuum Box or Extractor with Handwheel Adjustment and Ring Type Slot Seals. Used on Continuous Crabbs, Scouring Machines, Continuous Dyeing Machines, Scutchers, Dryers, Dry Cans, Mangles, etc.

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YES, really clean them—and without using volatile solvents! Here's how: After excess lube grease has been removed, dip cloth in solution of Oakite Renovator and wipe on surfaces. The fast emulsifying action of Oakite Renovator (no fire hazard because it's water-mixed) completely breaks up and removes grease deposits. With dirt gone, dry-cloth wipe your twisters—and the job is done easy as that.

For a show-how demonstration of Renovator's cleaning action right in your mill, call your nearby Oakite Technical Service Representative. To read the facts about the many Oakite materials and methods specially designed for the textile industry, send for the "Oakite 66 Digest". No obligation, either way.

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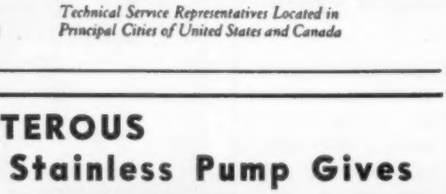
PATENTS PENDING



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One-piece rotor and shaft eliminates threads in the liquid end. Wetted parts of Type 316 stainless steel reduce corrosion and wear.

Controlled pump clearances assure positive product flow. No internal metal contact or friction between rotors and housing; flow settings remain constant.

Non-rotating seal with seal springs located outside of pumping chamber practically eliminate agitation and leaks. Maintenance reduced to a minimum.

Capacities 1 to 125 gallons per minute; speeds 50 to 600 RPM; pipe connections 1" to 2½".

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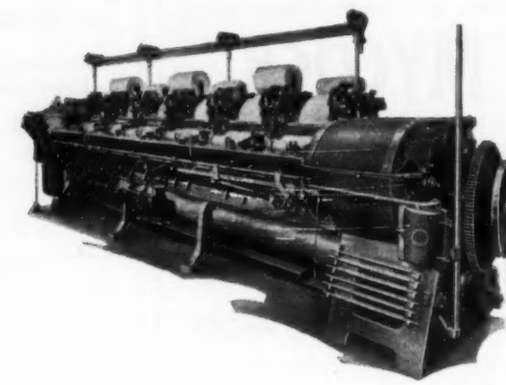
NASMITH COMBERS



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DESIGNING and MANUFACTURING

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CANVAS
TRUCKS

Style 27

And still to the same basic credo of Quality, Precision and Craftsmanship.

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W. T. LANE & BROS., Inc.

Manufacturers

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of textile looms and machinery.

Edward F. Bahan has been elected president and treasurer of **Bahan Textile Machinery Co.,** Greenville, S. C., succeeding his father, the late William H. Bahan. Mrs. Esther C. Bahan and Mrs. Winifred Peters (Mr. Bahan's widow and daughter, respectively) were made vice-presidents. L. E. Shooks is now secretary.

J. R. Angel has been appointed southern representative for the **Cook —P & N Machine Co., Inc.,** Boston, Mass. Mr. Angel will have his headquarters in Atlanta, Ga., and will cover practically all of the area south of the Mason-Dixon Line.

Arthur A. Boucher, former research chemist in the sales development laboratory, has been transferred to the sales department of Niacet Chemicals division, **U. S. Vanadium Corp.** Mr. Boucher succeeds James A. McCusker, resigned.

John B. Eisen, former group leader with the chemical research laboratories of American Viscose Corp., Marcus Hook, Pa., has joined the staff of the **Bjorksten Research Laboratories** as section leader at the Madison, Wis., laboratories.

Arrangements are being made by the **United States Testing Co., Inc.,** to open a cotton fiber testing and textile testing branch in Memphis, Tenn., from which will come scientific tests to supplement the data now provided by expert cotton classers.

Edgar E. George, former secretary, treasurer and sales manager of Dura-Products Mfg. Co., Canton, Ohio, has been appointed district sales representative, with headquarters in High Point, N. C., of the Baker Industrial Truck division of **The Baker-Raulang Co.,** Cleveland, Ohio.

Tennessee Eastman Corp., Kingsport, Tenn., has selected a site in Gregg and Harrison Counties, near Longview, Texas, for the erection of a plant for the manufacture of certain basic raw materials for use in operations at Kingsport.

R. S. Kersh has been appointed manager of central station sales and F. D. Weatherholt is manager of industrial sales, according to the industry sales departments of **Westinghouse Electric Corp.**

Sonoco Products Company, Hartsville, S. C., is celebrating its 50th anniversary. A booklet gives a picture story of Sonoco, its people, its plants, and its products.

James A. Davies, formerly supervising the sales service and application laboratories, has been appointed to the sales staff of the **Arnold, Hoffman & Co.** Mr. Davies will make his

Mr. Davies

Mr. Merrill

headquarters in the Providence, R. I., office. Replacing Mr. Davies in his former position is Arthur Merrill, Jr., former chief chemist of the Lawrence Print Works Division of The Aspinook Corp.

Atlanta Paper Co., established in 1868, manufacturers of folding cartons and corrugated shipping containers, is now in full production in its new plant located on a 17-acre tract. Modern in construction and engineering, the plant features a tremendous storage pit for jumbo rolls of paper. About 700 employees produce 10 to 15 carloads of finished products per day. Other products for the textile industry are display folding cartons; printed paper, glassine, cellophane cone wraps; gummed tape; and other specialty items. During the past three years the company has added new machinery.

Chemists and Colorists to Meet in Atlantic City

Atlantic City, N. J., will be the scene of the 28th National Convention of the American Association of Textile Chemists and Colorists. The date is October 13-15.

A number of technical papers will be presented, representing a cross-section of the entire industry. As usual, the intersectional contest will be held.

The Chalfonte-Haddon Hall hotel will be convention headquarters. Plans have been made for entertainment of wives of members while the men are attending the business sessions.

The Philadelphia Section is sponsoring the convention this year. Walter F. Fancourt III, of W. F. Fancourt Company, 516 Delaware Ave., Philadelphia 47, Pa., is general chairman.

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NO LOSS!
That's the Story of
* Glosstex
The Wonderful New Material For Handling Equipment . . . Reduces Losses Many Ways!

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18—Deliveries Saco-Lowell Drawing, common top rolls, spiral gears, 12" coilers, 1920 model.
2—No. 8 Universal Winders, 6 spindles, tube winding.
12—No. 50 Universal Winders, L drive, 6 spindles each, equipped with tubes.
2—New Supreme Knitting Machines, type MJ, 20" diameter, 20 cut, 1248 needle, 50" ga., Crawford Electric stop motion.
1—Taylor's Control Inst. for slasher.

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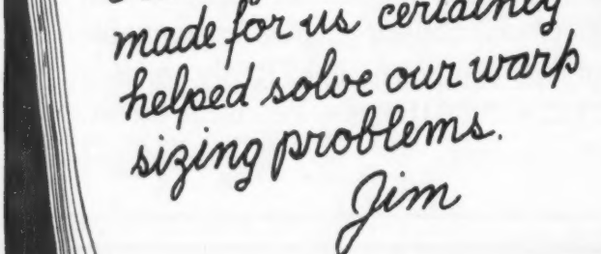

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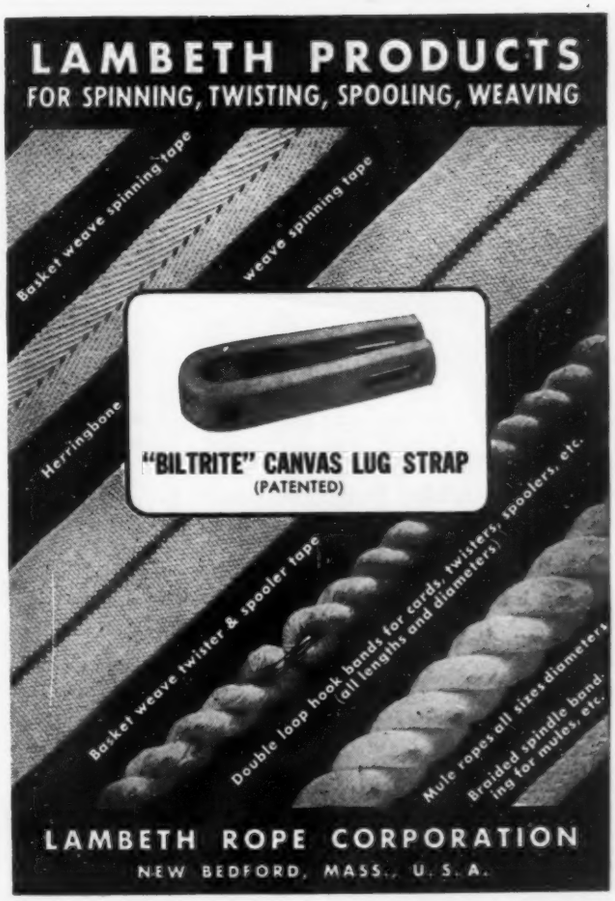
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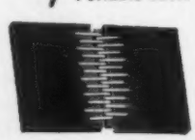

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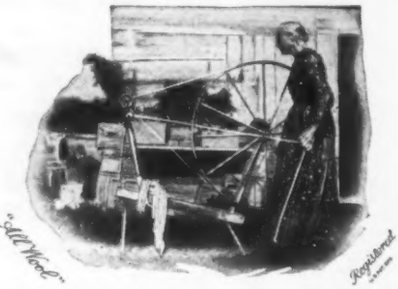

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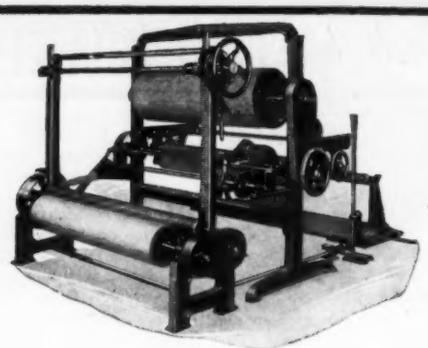

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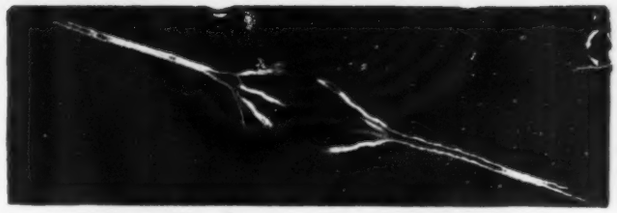

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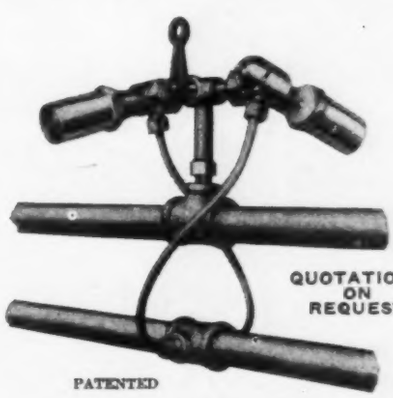

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WOULD you like to cut costs on wool scouring? Here's a Taylor Automatic Control System that recovers 50 to 100% more lanolin, cuts caustic consumption 25%, and uses much less water. What's more, scouring quality is much better and more uniform. Below is the system we installed on the scouring range (supplied by C. G. Sargent's Sons Corp.) at the Ames Worsted Company's Walsh Mill, Lowell, Mass. Temperature in all bowls is automatically maintained by 86-R Fulscope* Controllers. First and second bowls have automatic dumping of sediment by Taylor Flex-O-Timer* Time Cycle Controllers. Here's how it works:

1. Hoppers of first two bowls are dumped in precise sequence. Flex-O-Timer pneumatically operates lever motor to open gate valve in hopper bottom just long enough to flush sediment with *minimum* loss of water and chemicals.

2. Dumping period and interval between dumpings is fully adjustable to meet all scouring requirements.

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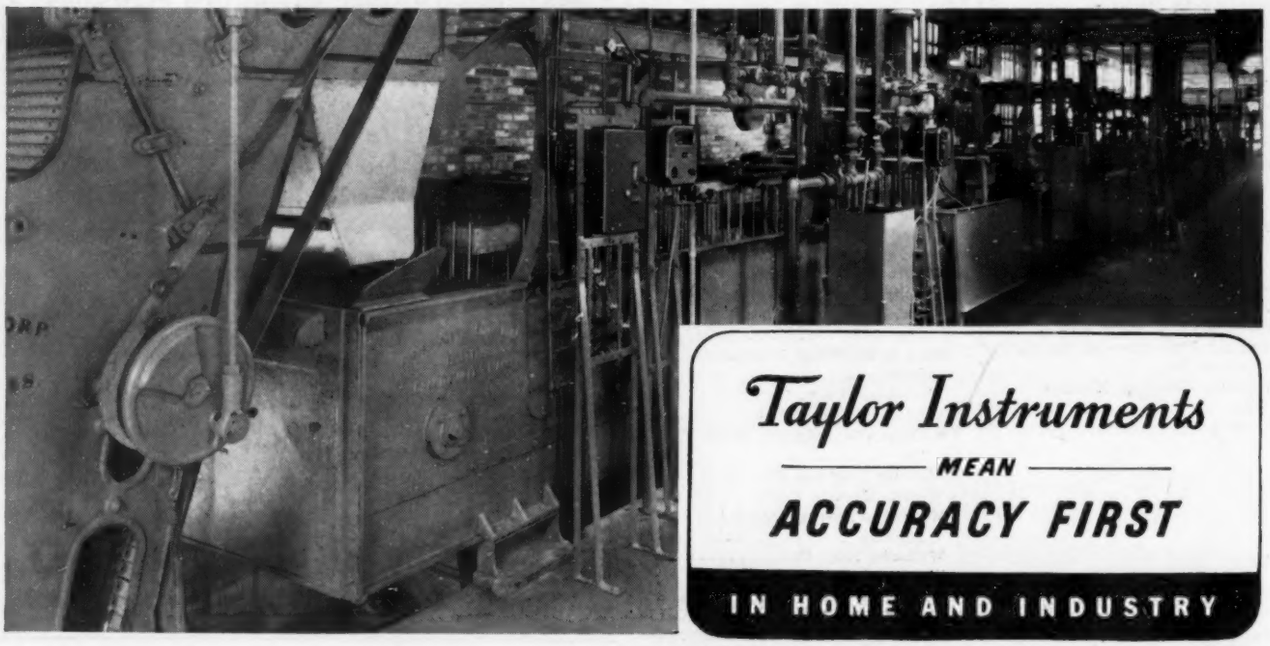
A dozen or more companies are now successfully using Taylor Automatic Wool Scouring Control. Names on request. Taylor Instrument Companies, Rochester, N. Y., and Toronto, Canada. *Instruments for indicating, recording and controlling temperature, pressure, humidity, flow and liquid level.*

* Registered Trade Mark

Taylor Automatic Temperature and Dumping Controls on wool scouring range at the Ames Worsted Company's Walsh Mill, Lowell, Mass.



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